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ABSTRACT

The publication contains thirteen reports from the Twentieth National Agricultural Policy Conference held September 22-25, 1970, at Pokagon State Park, Angola, Indiana. The conference was designed to assist extension workers by broadening their perspective, understanding, and handling of the methodology of public affairs education. Four topics in the field of extension education were studied. In Part I, "The University's Role in Public Policy Education", a strategy is offered which would enable the university to serve more fully the need of citizens for knowledge toward public decision making. Part II, "Policy Issues for the Seventies", points out that many decisions in agriculture today are being made by non-farm people, and suggests ways of broadening the base of public support for agricultural programs, issues, and people. Part III, "Income Maintenance Programs", examines goals, objectives, criteria, types, and rural impacts of income maintenance programs. In Part IV, "Environment and the Quality of Life", the relationship between agricultural and non-agricultural uses of rural environment is discussed, including problems of pollution which create a need for policies in the rural environment, and problems of population and the relationship of the quality of life to these topics. Institutional alternatives for improving our environment are explained. (Author/SJM)

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Increasing Understanding of Public Problems and Policies

1970

A Group Study of Four Topics in the Field of Extension Education

SP002 349

The University's Role in Public Policy Education

Policy Issues for the Seventies

Income Maintenance Programs

Environment and Quality of Life

Farm Foundation

Subjects Discussed at Previous Conferences

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Environment and Quality of Life

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3

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FOREWORD

This publication presents the major discussions of the twentieth national agricultural policy conference held September 22-25, 1970, at Pokagon State Park, Angola, Indiana. The conference was planned by the National Committee on Agricultural Policy and designed to assist extension workers who deal with agricultural and public policy problems. Ninety-seven representatives from 45 states, the United States Department of Agriculture, and other interested agencies participated in the conference.

The conference provided an opportunity for exchange of experiences and ideas, and the resulting intellectual excitement led to self-renewal. Few individuals in attendance are likely to think the same as before about the subjects of income maintenance, the environment, or the role of the university in education for public decision making. Such self-renewal will have far-reaching impacts on public policy education in the states and counties of the United States.

The reports of the conferences have also helped extend the benefits of the conferences beyond the participants. The conference reports have been made available not only to state and county extension personnel but also to teachers, students, and others interested in increasing understanding of public policy issues. The need is greater than ever before to develop intelligent and responsible citizens who can make informed choices and participate effectively in solving the troublesome and divisive problems that plague our society today.

The National Committee on Agricultural Policy voted to change its name to the National Public Policy Education Committee since its activities have expanded considerably beyond those originally envisioned. The National Committee and the conferences have benefited from the devoted services and interest of a number of people who have participated regularly in the conferences during the past twenty years. Included in this group are Joseph Ackerman, former Managing Director of the Farm Foundation; T. E. Atkinson, Arkansas; G. Max Beal, Maryland; S. Avery Bice, Colorado; J. Carroll Bottum, Indiana; W. D. Curtis, Louisiana; John O. Dunbar, Indiana; C. E. Klingner, Missouri; J. B. Kohlmeyer, Indiana; Arthur Mauch, Michigan; Wallace Ogg, Iowa; M. C. Rochester, South Carolina; and Tyrus R. Timm, Texas. The pioneering efforts of these individuals are responsible in a large measure for the tremendous strides that have been made in agricultural and public policy education.

The Farm Foundation, the Center for Agricultural and Economic Development at Iowa State University, and the Agricultural Policy

Institute at North Carolina State University assisted in developing the program for the conference. The Farm Foundation, following its policy of close cooperation with the state extension services, financed the instructional staff, the transportation of one delegate from each state, and the publication of this report.

R. J. Hildreth, *Managing Director*
Farm Foundation

CONTENTS

		PAGE
INTRODUCTORY REMARKS	L. T. Wallace	1
PART I. THE UNIVERSITY'S ROLE IN PUBLIC POLICY EDUCATION		
The Role of the University in Public Policy Education	James T. Bonnen	5
Improving the University's Performance in Public Policy Education	W. G. Stucky	15
The University's Alternatives	Charles E. French	27
PART II. POLICY ISSUES FOR THE SEVENTIES		
Emerging Issues, Policies, and Programs for the Seventies	Don Paarlberg	37
Issues and Problems of Immediate Concern	J. Carroll Bottum	46
Issues and Problems of Immediate Concern	Gene McMurtry	49
PART III. INCOME MAINTENANCE PROGRAMS		
Goals and Objectives of Income Maintenance Programs	Martin Pfaff	55
Criteria for Income Maintenance Programs	James M. Lyday	65
Types of Income Maintenance Programs	J. Paxton Marshall	74
Rural Impacts of Income Maintenance Programs	W. C. Motes	86
PART IV. ENVIRONMENT AND QUALITY OF LIFE		
The Nonurban Environment, Pollution, and the Quality of Life	Michael F. Brewer	97
Population and Environment	Calvin L. Beale	104
Institutional Alternatives for Improving Our Environment	A. Allan Schmid	112
PARTICIPANTS		125

INTRODUCTORY REMARKS

L. T. Wallace, Chairman
National Agricultural Policy Committee

Welcome to the twentieth National Agricultural Policy Conference. It appears that we have survived Joe Ackerman's retirement, and the helm of the Farm Foundation is in the steady hands of Jim Hildreth and Neill Schaller.

As we begin this meeting, I want to draw your attention to the criteria the Program Committee used in developing this year's conference. One aim was to broaden our perspective so we can become better teachers, communicating more timely and relevant information. We also tried to select topics which will broaden our understanding and handling of the methodology of public affairs education. We hope to provide a forum for the discussion of case studies—not only in our formal meetings but also in the informal sessions which occur "after hours," because we believe these informal sessions are perhaps more important than the formal program.

Indeed, we hope the program participants provide that essential catalytic function necessary to push us all past that point where we would normally stop. Here the Program Committee places the responsibility for learning and education directly on your shoulders. The responsibility for the success of this program and for responding to the professional challenge it presents is shared equally by all of us. Let us again rise to the occasion and make this conference "the best one yet."

PART I

The University's Role in Public Policy Education

THE ROLE OF THE UNIVERSITY IN PUBLIC POLICY EDUCATION

James T. Bonnen
Professor of Agricultural Economics
Michigan State University

In 1965 President Johnson invited the presidents of the state universities and land-grant colleges to a White House conference. He asked them what the universities could do to help solve the urgent problems of this society. He asserted that the universities had such a role; he was not sure what it was, but would they please get on with it. The presidents discussed over the next two years the question of the role of the university in public affairs. They could not even agree on a definition of what it was they were talking about. They then established a task force on public policy. This task force developed a description of the problem and approached Carnegie for support to study the issues. I became the Director, and was, in effect, asked to attempt to impose some intellectual order on the wide range of issues involved in the question of the university's involvement in society.

We got under way in the summer of 1968. I spent a careful first year just talking to the most knowledgeable people that I could find trying to define the problem. We then organized a team of five interviewers and went into our laboratory of universities. We interviewed across the faculty, student body, trustees, and administrations on eighteen campuses. In addition in each of the states involved, we tried to see the appropriate committee chairman and the primary political leaders in the house and senate of each state legislature, and if not the governor, those people on the governor's team closely involved in the issues of education. We attempted to identify and interview in the informal power structure of the state.

The prime objective of the study was to define public affairs as a university function. The study arises from the socially urgent issues that now press upon the university from the pathologies of urban life and of growth. These are the multiplicity of difficulties we call the "urban problem" (without really knowing what we are talking about) and the environmental problem and other unanticipated consequences of growth.

The university has long been involved in various aspects of societal problem solving. What is different, in the eyes of the university

presidents, is that the societal pressure today is for total university commitment. As society's problems have become more systemic, in order to respond we have had to put together a larger, more diverse package of resources. This forces us to deal with a very large part of the university at one time—not just one department or college. The presidents now find themselves in the middle of problems which in the past came in through the doors of the deans, the department chairmen, and the extension staff.

There are real dangers for the university whether it accepts or rejects society's challenge. If it completely rejects the challenge, there is a high risk of withdrawal of public support and a decline in the relevancy of the university as an institution in the society. The presidents see this very clearly. They also see that uncritical acceptance of all of society's demands could lead easily to resource exhaustion and certainly to a grave distortion of priorities and thus to a subversion and possibly even to destruction of the university as an institution.

The study has several objectives: (1) define public affairs as a university function; (2) develop the beginnings of a philosophy of public affairs for the university; (3) identify some of the criteria for university involvement in public affairs; and (4) identify some of the strategies of involvement that are open to a university.

In recent years I have written several papers highly critical of the way that we in the land-grant system manage our affairs. I said essentially that we were failing to realize our potential by so wide a margin as to almost constitute malfeasance, and that we were allowing our institutions in agriculture and in the land-grant system to grow obsolete. I also said that the changes going on around us were proceeding at a faster pace than we were adjusting to them. I still believe this.

In case after case of university involvement in societal problems of research and outreach systems, our potential far exceeds our performance. We in agriculture have a potential contribution to the university and to society of which we seem not to have the slightest inkling. People on the outside now seem to have a better appreciation of this than we. Everywhere I went on the study I discovered a positive attitude toward the land-grant experience. From the medical school to the business school, administrators worried over what they are going to do in this area are using the agricultural and land-grant experience as a model. There was nothing negative in their attitude toward the land-grant experience.

The prospect is exciting. And if we respond to the needs of the university in facing the urban crisis, environmental problems, and other specific public affairs challenges, even half as successfully as we

have already in the land-grant experience, another great chapter will have been written in the history of the land-grant tradition. If we fail to respond, not only will the land-grant tradition, I think, greatly lose in luster, but the university will likely cede to other, yet unknown institutional forms, its role as the knowledge center at the cutting edge of society's problem solving.

That is the nub of the problem. Those who have been deeply involved in the land-grant tradition have a contribution to make which is potentially staggering—if we will but grasp it. The challenge to the university today is quite as great as that of the challenge to the old land-grant college. It may in some ways be even more critical to the society.

THE CHANGING UNIVERSITY ENVIRONMENT

The university is facing this challenge in a greatly changed and still rapidly changing environment. That the facts of life have changed I think we do not fully appreciate. Changes come so fast now, it is difficult to understand them. Let me mention what I believe are a number of the most important.

First, western civilization and the world are at a major node in history. We are in the middle of a transformation as great as that between the Middle Ages and the Renaissance. Many of our old assumptions about society and man must be re-examined. The purpose and utility of most major institutions must be re-examined, modified, and adapted to new conditions. The university is not excepted.

The public and private decision systems of society that the university must reach have grown so greatly in scale and have become so specialized in nature that access to them must be managed at not just local but regional and national levels today. Thus, the universities can no longer effect an impact on a major decision system with the local level strategy and inputs that have prevailed in the past. Although we have long had important national decision structures, the relative mix has changed so drastically that no one university or university outreach alone has the resources and organizational capacity, if it ever did, to deal effectively with national decision systems at the scale that now prevails, for example, in education, health, or transportation problems.

Society is becoming knowledge centered. The educational process has become central to economic and social processes and to growth itself. It is a major strategic input. In the early stages of industrialization society's capital was invested primarily in machines. Increasingly now the largest and most strategic investment is that made in human

resources, in organization devoted to problem solving, and to innovation in the production processes. If I may quote Gerrard Piel, "Today the economically significant industrial property is not the machine but the design and not so much the design as the capacity to innovate in process and product." This is scarcely physical property at all. Rather, it is an organizational capacity. It is the organization of human knowledge and the human capacity to create new knowledge. Thus, the university has become part of the knowledge industry, and finds itself so intimately involved and essential to society that its options no longer include withdrawal to the ivory tower. This message comes across from every president we talked to, from the private institutions to the land-grant universities.

The increasingly obvious necessity for life-long education and the demand this places on the university is one change for which we are unprepared both in organizational structure and in values. We simply have not faced this one, and it is upon us in all the professions.

We also have had a growing expectation of ever greater access to higher education that is moving us from mass education to universal access to higher education. This is the logical conclusion, the final step on the road on which we started in the nineteenth century when we committed ourselves to higher education as a component of a democratic society. This commitment is part of the land-grant tradition. It affects all public higher education and now even private education.

Finally, what is expected of the university as a corporate citizen has changed greatly in the past five years. This constrains now as it never did before university policies concerning admissions, employment, land use, purchasing, investment, and housing. It is a distinct category, I submit, from what you and I have in mind when we talk about university public affairs.

The university of today must inevitably be different from that of the Middle Ages, or of the Renaissance. Yet people talk about the university as if it were an ageless static entity. The university has long been evolving, even if slowly, in both its values and its organizational forms. And we are in the process of major change today. Every social institution is the product of its environment. The university is no exception.

CHANGES IN THE UNIVERSITY

Changes in the university itself are important to recognize if we are to understand the problems of university public affairs.

First, in twenty years we have transformed the scale of the uni-

versity so incredibly as to put almost every question about universities into an entirely different context. The university is now a large-scale organization.

Second, we are now all bureaucrats. Universities are bureaucracies, the professor no less than the building and maintenance people.

Third, the research function has grown far more than any other dimension of the university. Many things could be said about that, including the fact that it has distorted our priorities, which we are now in the process of re-examining.

Fourth, is the great failure of liberal education. Our curriculum is in shambles today because no one knows the values around which it should be organized. What had given it coherence in the past, even in technical education, was the value system that underlay a liberal education. The collapse of this value system has led to a failure of nerve that is central to the current debate over what a university is or should be, what the curriculum should be, and what the faculty can contribute. I might add as a footnote that the light at the end of the tunnel, as I see it, is to be found in a little book by Sir Eric Ashby called *Technology and the Academics*. He argues that we must reorganize the undergraduate curriculum around what he calls technology or applied science, the application and the uses of technology, if we are to recapture coherence and meaning.

Finally, the whole structure of governance and the distribution of power within university decision making has been transformed within the last twenty years. The faculty has over this period slowly gained formal access to the decision process. But the faculty is now being overrun from behind by a substantial rise in student access to the power of decision and representation in governance. This is all matched by a decline in the administrator's power of decision.

The universities are totally unlegitimized institutions today. I was amazed at the bitter hatred of universities and all their works which we encountered in our interviews in the informal and formal power structure of the states, and on boards of regents. The university is in serious trouble. It now has to relegitimize itself in a very fundamental way. This is not just a transitory phenomenon, it has been building for a good twenty years.

The choice that the faculty now has is really a very simple one. It is between the transfer of power of decision either to their own administrators or to trustees generally ignorant of what universities are about. Most trustees we talked to did not have the foggiest notion what a university truly should be or how it should function. They were

not selected for that purpose. They were never expected to mess around on "the inside," but there they are now competing with the students and the faculty to see who can destroy the executive function first. Somebody is going to have to defend the university and in many cases against the trustees.

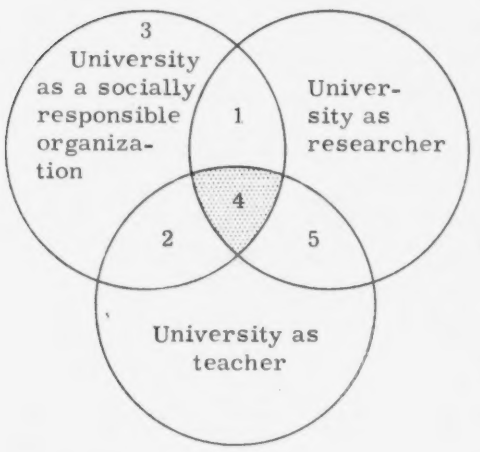
The university must reform itself before it can hope to reform society. We are not going to be successful in major outreach missions in new social problems until we face up to the problems that we have on the inside. Many of these problems are the result of the fact that we are more intimately involved with society today and may not escape those "outside" problems even on the inside any longer.

THE PROBLEM OF DEFINITION

What do we mean by university public affairs? How is it defined? It is clear that the conventional notion of teaching, research, and service, in which service is equated with the university's public affairs role, is entirely wanting as either a description or a conceptual statement.

As the university's various public affairs activities are sorted into distinct categories, it becomes clear that public affairs is not a unitary or pure category such as teaching or research. The one common thread or dimension is social response or responsibility, but it is clearly more complex. If you will turn to the diagram below you can see how we finally sorted out the primary elements of the definition of university public affairs.

A Suggested Paradigm



1. Mission-oriented research.
2. Manpower training and professional and graduate education.
3. University behavior and activities undertaken as a responsible corporate citizen of its immediate specific communities.
4. The central public affairs commitments involving development processes, delivery systems, and institution building.
5. Renewal of the university—through research inputs to teaching and the education of the next generation of university researchers.

At least three dimensions seem essential: the university as a researcher, the university as a teacher, and the university as a socially

16

responsible organization. The true public affairs role is always a combination of the three. Thus, category 4 in the diagram is the heartland of university public affairs.

What are the characteristics of university public affairs besides involving research, teaching, and some public commitment? We found that these public affairs activities in some degree involve developmental processes. Second, we found that in mature form they involved institution building. And third, there was invariably a conscious articulated delivery system for knowledge. These are the essential characteristics.

In practice where we draw the line between what is and what is not university public affairs depends both on the nature of the environment and the values that the university has been built around.

Thus, we would define public affairs as those activities of a university beyond its immediate civic responsibilities that involve *conscious corporate commitment* to some role in the *problem solving efforts* of society and focused on the developing of human, national and community resources. It involves a *purposive delivery of the university's special competence and resources* to organizations and individuals outside the university. This reaching out into the processes of society will usually lead to participation in the *creation of new institutions* to facilitate problem solving. University public affairs is the response of the university to what it perceives to be primary local, state, regional, national, or world needs. Thus, it is university teaching and research combined in problem solving missions, conceived in the *public interest* and ordered by the university's understanding of the priorities of social need and the constraints of the university's special competencies, resources, and societal environment.

University public affairs activities are only parts of larger public affairs social systems. Each system is unique. Thus, we must conclude that any attempt to construct a general university public affairs structure for all purposes is a difficult if not illusory objective. Second, our experience indicates that each public affairs system must be designed, or institutionalized, around a specific and concrete objective. Third, the university, which has limited resources and expertise, must consciously choose those specific university public affairs systems that it will support. It cannot support an indefinite number. Fourth, the university is only one actor in any public affairs system. It cannot solve any social problem by itself. To raise such expectations is irresponsible.

The present set of constraints and the environment suggest that one of the most difficult things the university faces right now is making choices, limiting itself so that it can attain some of its ends. The

problem that we have gotten ourselves into is that we have, in too many instances, promised everything to everybody, and not delivered on a fraction of it. This is one reason for the decline of the legitimacy of the university.

THE CHARACTERISTICS OF SUCCESS

What are the characteristics of the successful systems? First, they all have some useful knowledge to deliver. Therefore, research is a necessary prior input. You can see it in our own land-grant experience. The idea of extension never really worked until the research investment provided something that extension could deliver. Some means of communicating research knowledge has to be provided. A professional journal just will not do. Since the Middle Ages the researcher has been committed to communication of his knowledge and to the fact that it must become public knowledge. What has happened is that the environment has changed so drastically that it will no longer do just to print it. We simply must have a better delivery system today. We must link out into society and also (something that I find many extension people do not always appreciate) we have to link back into the university's resources. Extension people will sometimes do a marvelous job of wiring together the outside and fail to do their homework. Often to be successful as much politicking is needed inside the university as outside.

Another critical dimension comes up in the necessity for institution building. It is critical because in a sense we are forced in the solution of most problems to create new institutional arrangements. The degree of consensus that prevails in a community must be at a reasonable level or we will not succeed. We just do not go out and successfully change society forcibly. The higher the level of consensus the less the risk and the higher the probability of success. In most cases, program people describe a need for the creation and organization of clientele to sustain new programs. It would appear that the degree to which this is a concomitant of program success depends on the degree of consensus in the community concerning the program goals and the means used to attain those goals. If the community and its major organizations agree that some set of objectives should be pursued, there is far less need to develop specific clientele organizations. On the other hand, programs being developed for embattled minority groups quite clearly will encounter difficulty in becoming self-sustaining until politically effective clientele actively support the program.

We must always proceed in a manner that does not threaten or challenge any of those groups with which we have to cooperate. I

sometimes think we have almost forgotten this strategic approach in the land-grant tradition. This approach means that, as a matter of initial strategy, we must practice a very careful organizational neutrality. Later we may have more freedom with the same groups of people but not initially when we lack full credibility. Also, we probably should not become involved in institution building initially. The creation of new organizational structures inevitably threatens someone in an existing structure.

Another important strategic consideration is that of responding to the felt needs of various groups in the community. There are several reasons: In the long run, we have to in order to create viable programs, and also to gain credibility. In the short run, we end up responding to some pretty minor, even silly, things sometimes to gain access (and are criticized for it), but it is still a strategic consideration.

Another dimension of importance is being very careful not to take full credit for program accomplishments. Taking such credit is a strategic error often made in building new university public affairs systems.

When institutions are being developed for a program, a natural human instinct frequently destroys their potential. And that is the desire to eliminate all ambiguity from organizational relationships and role definitions. It must be resisted. It is ambiguity that most often creates both the incentive and the freedom for initiative and creativity on the part of individuals as well as organizations.

Pragmatic behavior is a trait of those involved in successful public affairs systems. It is necessary for survival in most social and all political processes. Academics are not known for their pragmatism and this becomes the basis for much of the difficulty that faculty members encounter when they become involved in university public affairs activities.

The nature of our society is changing. We cannot even do the old cooperative extension act the same way we were doing it twenty years ago—and we are not. The greatest residium of knowledge about how to do university public affairs clearly resides in the land-grant tradition. It would be criminal if we do not respond to the needs of the rest of the university in facing its challenge in public affairs.

I believe the universities have a great potential in public affairs if they will focus on the problems of society. Great changes are occurring in the understanding of the land-grant experience. Perhaps we are overly defensive in agriculture. We have been at the receiving end of too many pot shots and on the outside for too long. We should learn to relax and be sensitive to others, while doing our best and letting

the chips fall where they may. People experienced in the land-grant tradition have a great contribution to make in the challenge universities face in mounting new university public affairs systems.

IMPROVING THE UNIVERSITY'S PERFORMANCE IN PUBLIC POLICY EDUCATION

W. G. Stucky, Education Leader
Center for Agricultural and Economic Development
Iowa State University

My purpose is to offer a strategy which would enable the university to serve more fully the need of citizens for knowledge for public decision making. Contemporary conditions and events have dramatically placed an obligation on the university to aid citizens in more quickly overcoming society's human welfare problems. The suggestion that follows is introduced to stimulate our thinking about developing the use of science to foster *social innovation* as a parallel to our well developed capacity to foster *technological innovation*. Putting new technology into the economic system without accompanying changes in the social system produces a certain degree of disorder.

INSTITUTIONAL SYSTEMS AND THE HUMAN CONDITION

What makes the most difference in the human condition? Modern man is socialized, protected, and directed by man-made institutional systems. These institutional systems provide the mechanism through which man makes choices relating to his human condition. The family, the school, the health care system, law, jurisprudence, public codes, taxation, roads, communication, self-government, waste disposal, research, national defense, natural resource conservation, religion, and tap water are just a few of the human institutional inventions that greatly affect the quality of living. It is clear that the functions of these institutions are vastly more than a prerequisite for survival and orderliness in the complex contemporary economy.

If we are to make any sense at all out of discussing issues relating to improvement of the human condition, we need to conceptualize the content of an ideal life of quality. At least I do, and thus I have made a rough outline to serve my purpose (see appendix, pp. 25-26).

Scientific Versus Folk Knowledge

Scientists have been quite shy about studying their institutional systems, which are human inventions responsive to human decision. But not so the "firm," which also is a human invention and subject to human decision. The firm gets much attention and therefore people know a whole lot about it. Some firms appear and disappear and some make transitions to fit contemporary demand. From this applied

scientific effort people have learned how to improve continuously the performance of the firm.

Why could not similar scientific attention be directed to the institutional system so that its performance can be regularly and continuously improved? Obsolescence within the firm is a cost and when discovered is no longer tolerated. Likewise obsolescence in the institutional system is a cost and is borne by someone or by groups of people. This cost may show up as a gross social welfare problem such as poverty, or pollution, or crime, or overpopulation. Yet people know so little about their institutional systems whose performance was intended to avoid these ills, that they search for hidden villains, blame their elders, or rebel against the system. There is no lack of reformers.

One distinction between improving the performance of the firm and that of the institutional system must be noted. Each is a human invention subject to human decision, and the wisdom of each such decision depends upon the supply and quality of relevant knowledge; in the firm's instance relatively few decision makers are needed—sometimes one, but in the institution's case a larger number of public decision makers are involved. This is where the ball game is when it comes to education for public decision making. Categorically there are three elements to that public: the professional establishment which operates the system, the users of the system, and the financial supporters of the system. These elements may be either one and the same or separate, as with the local school where decision elements are the faculty, the students, and the taxpayers, respectively.

The big problems of our time, that solved or unsolved will have the most impact on our lives in the balance of this century, are essentially political in nature. They are political in the sense that the people of the country must come to terms with problems that affect individuals but which individuals cannot control. Control can be gained only through the public decision-making process. People in society thus have to depend on some systematic means by which they can come to know the world, the developmental forces, and the questions on which consensus must be reached.

GETTING THERE FROM HERE

The university needs the ability to create the unique research enterprises and the educational delivery systems which enable our citizens to comprehend, manage, and rationalize contemporary society. We once thought that if the people were provided an adequate means to improve the economic performance of firms, the resulting increase in labor productivity and income would raise the level of liv-

ing and increase the well-being of all people. Our forebears proudly organized, with public support, "definite and distinct" extension educational enterprises, backed up by a specialized university research system, to improve the productivity of firms in agriculture. But changes in technology have social and economic consequences. We did not plan to have poverty, to pollute our environment, to depopulate rural areas, to crowd people into ghettos, to dislocate people from jobs, and to increase the per capita costs of operating rural institutions. These problems, like many others, are external consequences of successful transition in the production and marketing systems. A failure to make like transitions in the human institutional systems is the reason for these mountains of neglect.

The university can meet the challenge of supplying this knowledge if it transforms itself by applying lessons from its own heritage and by using particular contemporary business and research strategies.

Is a Different Strategy Needed?

One of the lessons is that for satisfactory progress to be made, a research base must be provided on a scale that matches the scale of the problems to be solved. The post World War II efforts of the Extension Service and the Agricultural Experiment Station to reorient programs toward more broadly based human welfare problems have been very sincere. They have been carefully developed, articulated, and legitimized through appropriate channels of the land-grant university system. Yet, despite these earnest efforts, the land-grant system's research and extension programs simply have not kept pace with the nation's growing human welfare problems.

It was not the same story as their record in providing technological innovations to improve the performance of agricultural firms. This latter enterprise and, in fact, the whole agricultural industry was converted from dependence on folk knowledge to scientific knowledge in less than fifty years. Producing new technology is still a very vital and needed function to foster progress and meet the needs of a growing population with rising expectations. The organization for improving agriculture was set up as a semi-autonomous system so that it could plan and develop from a conceptual horizon highly relevant to its function.

Thus, a second lesson is that a "definite and distinct" organization is needed if human resources for a new function are to perform their function successfully. Modern industrial systems have perfected this system of organization to a high degree. General Motors Corporation, for example, makes Chevrolets in a separate division from its locomo-

tive division. Donald Schon, in his book, *Technology and Change*, refers to this as "the strategy of diversification." It means that new capabilities can be competitively developed only to the extent that human professional resources are allowed to arrive, unencumbered by old responsibilities and norms, on a different conceptual horizon relevant to the success of the new capability desired. Rarely is a new capability achieved by retreading an old system.

Then how do we apply this strategy to the present situation in the land-grant university? We must recognize that a new function is being dealt with when citizens wish help to modify, innovate, transform, do away with traditional systems, or whatever it is that makes the most difference in improving the human condition. A new proposition can be advanced that the university should examine the function of social innovation and come to terms with the research and educational requirements that would enable the nation's people to improve the performance of institutional systems having major influence on human development, the quality of living, and human welfare. It would take a "definite and distinct" research and educational outreach organization within the university to appropriately and adequately deal with the problems of limiting obsolescence in these major institutional systems. This new research and educational function would be a coordinate function of the presently well organized technological innovation function of the Agricultural Experiment Station and the Extension Service.

Some tentative identification of institutional systems is necessary as a basis for discussion and future conceptualization. Without arguing the merits of the following selection, the specification of four such systems will get thinking started. (1) The *taxing system* is becoming increasingly incomprehensible to the American public. Yet people should know from the Congress to the local school district how taxation distributes the burden of support for public services and whether that burden is equitable; how the taxing system affects the quality and distribution of housing; how it affects the location of economic activity; and how it influences the quality of the environment. (2) None of the social systems have longer direct influence on human welfare than *education* from pre-kindergarten through adult education. Policy for a highly urbanized and technocratic society should aid development by increasing the supply and lowering the individual cost of education as a life-long necessity. (3) *Jurisprudence and public codes* are neglected by scientific study. Thus people are less and less aware how the legal system and public codes affect their welfare and individual freedom. (4) The greatest concern is the dwindling ability of the citizens to have an "enlightened discretion" and sense

of participation in *governing themselves*. The problem is becoming acute at both extremes—the major cities and the rural counties.

The university can overcome its organizational insensitivity to these matters. It can gradually enlarge the supply of knowledge to help people improve the performance of systems like those above. Below is outlined one strategy which is staged in this illustration over a ten-year planning horizon. This strategy recognizes that present resources cannot be shifted in significant measure from the technological function on the horizontal axis (Figure 1) to the social innovation function on the vertical axis, which is in a wholly new direction. With presently limited resources only small incremental shifts can be turned to the new function.

Stage 1. The deans, with the overall responsibility for research and extension administration, can with the president establish as a developmental objective the providing of scientific knowledge and public education on one important system affecting human welfare. They create the research base by making a modest but distinct research commitment. In Figure 1, the taxing system is the case to be illustrated. The initial research goal is represented as X_1 and contains the knowledge needs of state citizens confronted with making decisions on taxation.

Almost every university research and extension service has for brief periods organized special research task forces and extension efforts to respond to critical local problems. The particular model for the strategy illustrated in Stage 1 is Iowa's special operation, "Financ-

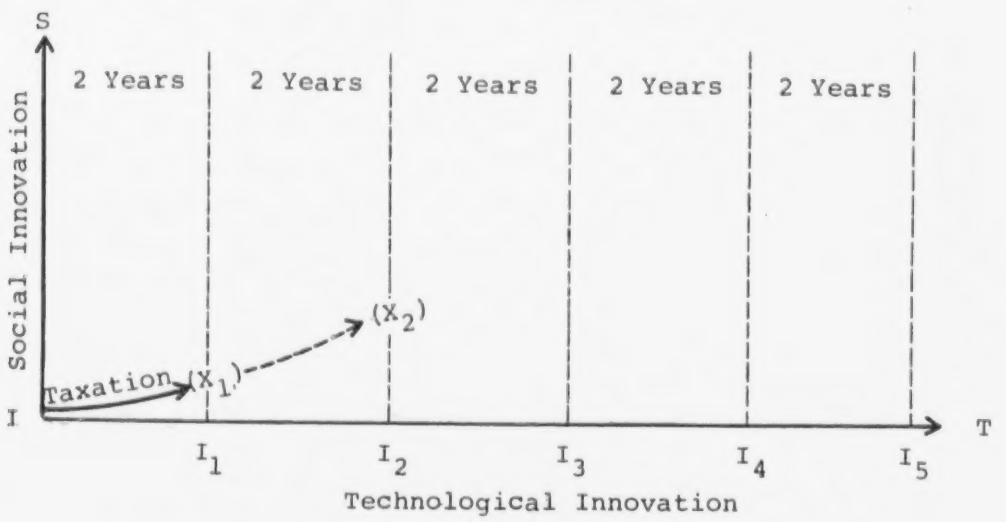


FIGURE 1. FLOW OF RESOURCES TO NEW RESEARCH AND EDUCATIONAL FUNCTIONS, STAGE 1

ing Our Public Services," with emphasis on the incidence of taxation and future educational costs. The research phase produced data on the incidence of Iowa taxes for twenty-one different occupational and income groupings, the use of tax dollars by categories of public services, and the future funding needs of these services given the goals and population changes in Iowa. It produced a predictive tax incidence model which could be used to determine the changes in incidence by substituting one tax instrument for another in raising funds for different revenue goals.

The operational and strategic significance of this effort was the setting of educational goals and the organization of special research teams and educational strategies, which were a departure from normative functions and organization, to meet those goals. The research team, consisting of nine scientists with six working for a year, produced the data. Extension operationalized a special educational delivery system to educate citizens and leaders on the content and meaning of the data. This demonstrated that modest resources can perform at goal X_1 which is on a developmental trend line tangential to the main line, or the technological innovation function.

It is important to know that if new research needs and educational missions are not established for meeting the succeeding goal X_2, the resource people fall back at B (Figure 2) to the main function of the organization, which they consider their "normative" function. This "fall back" is normal when new missions are not established to further the understanding of the taxing system. After the fall back

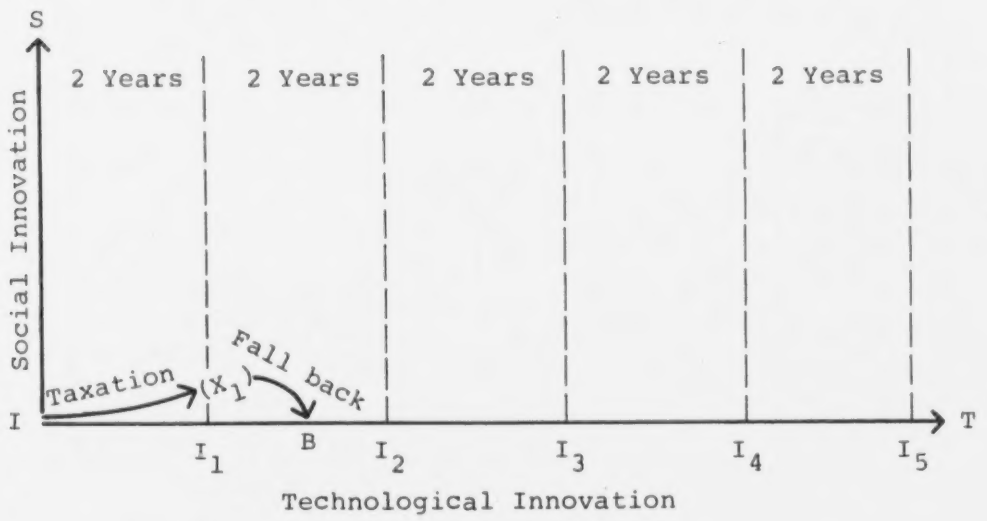


FIGURE 2. FLOW OF RESOURCES TO NEW RESEARCH AND EDUCATIONAL FUNCTIONS, FALL BACK SITUATION

the research establishment has lost the capacity to produce a continuous supply of more sophisticated knowledge, at least until it "starts over" in developing this capability. However, when the special forces are operating at X_1, they discover many new needs and demands for continued research and educational assistance for that problem set. Success in developing this future capability depends on the research director purposely organizing the research enterprise around the institutional system to be provided the scientifically acquired knowledge. When the scientist begins to relate to the needs of the institutional system he begins to produce knowledge which is highly specific to improving its performance.

Stage 2. At the second stage the administration can program assistance to a second institutional system. In Figure 3 this program is directed at producing the knowledge the public needs in order to understand and improve the local school system of the state, and the transitional needs this system confronts if it is to fit contemporary economic and population structures and new learning.

When these resources have researched the Y_1 goals, they will have discovered the local needs which can be articulated in the Y_2 goals. This is a simple growth line for any research effort which discovers, from each stage of knowledge development, relevant new and more complex questions to be answered.

Successive Stages. We can visualize a pattern of development which allows the resources newly directed toward helping institutional systems perform better, to move to successively more complex targets

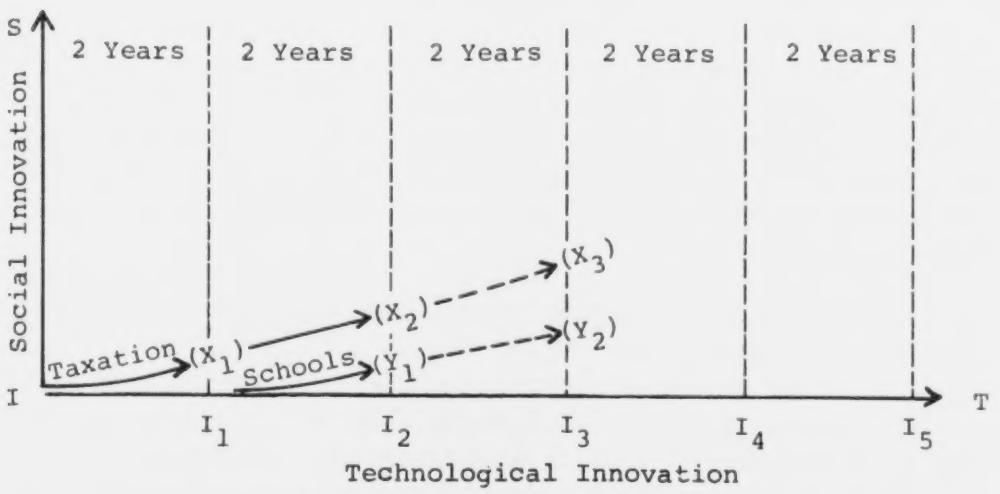


FIGURE 3. FLOW OF RESOURCES TO NEW RESEARCH AND EDUCATIONAL FUNCTIONS, STAGE 2

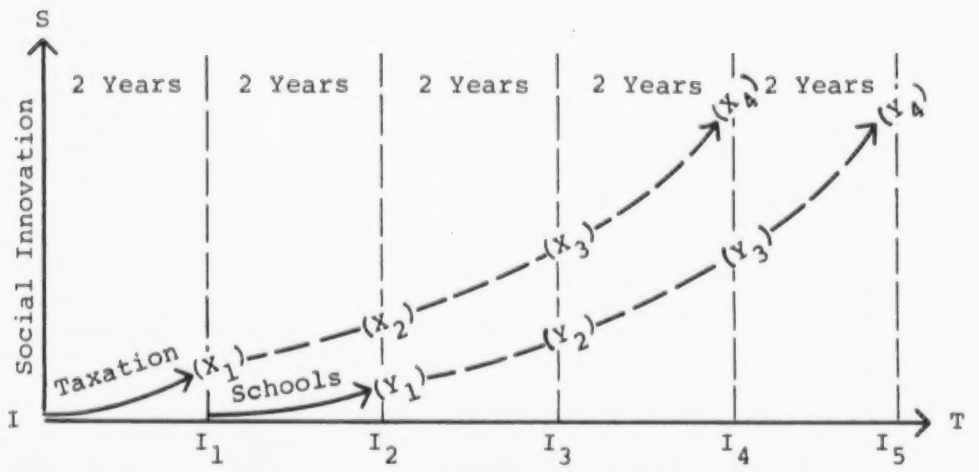


FIGURE 4. FLOW OF RESOURCES TO NEW RESEARCH AND EDUCATIONAL FUNCTIONS, SUCCESSIVE STAGES

pointing eventually to goals X_n and Y_n (Figure 4). These goals need to be conceptualized originally only as broad functions of research and education for institutional innovation to help direct resources toward that capacity. Later experience will allow these goals to be more specifically defined. Without that "capacity goal" of X_n and Y_n, the pull of the old technological function will reclaim resources in short order.

Reconceptualization

One lesson learned from history is that, at some stage of process and product development, men develop new concepts which apply to what they are attempting to do (that is, from man flying like bird to flying machine, from horseless carriage to automobile, from farmer institutes to extension service, etc.) This process of bending old ideas to new uses goes on constantly. Progress is slow at first and crude in retrospect. However, at the point of reconceptualization, progress accelerates rapidly.

Thus in Figure 5 in an indeterminate zone of time R, the university system will reconceptualize its (X_1 to X_n), (Y_1 to Y_n), and N^{th} (all other possible) functions, recasting and reorganizing itself to better perform the social innovation function. The N^{th} functions represent our other institutional systems whose improved performance is critical to man's welfare. At the time of reconceptualization, resources are then not further weaned from the old function but flow from outside sources to the new function. This becomes the time when "Hatch

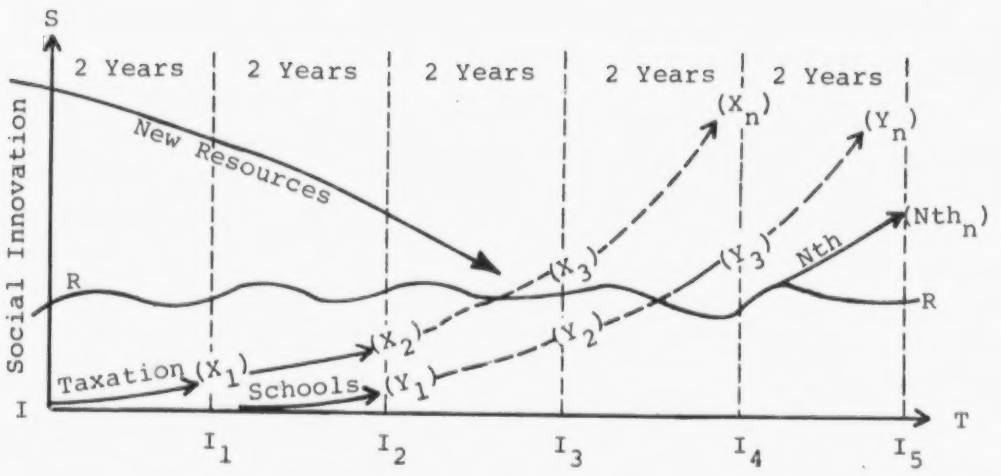


FIGURE 5. FLOW OF RESOURCES TO NEW RESEARCH AND EDUCATIONAL FUNCTIONS, RECONCEPTUALIZATION STAGE

Act II" (the social innovation research equivalent of the original Hatch Act) and "Smith-Lever Act II" can build a permanent fiscal base for these activities in the university as "definite and distinct" research and educational capabilities. The equivalent Hatch Act II and Smith-Lever Act II would tie in resources with federal agencies different from their present linkage solely to the Department of Agriculture.

If all of this has begun to have a familiar ring—it should. This whole strategy is copied from the process used by the resident faculty, near the turn of the century, to "move" the land-grant university from on-campus teaching to teaching people in the countryside, to give them knowledge for practical application. A "definite and distinct" research and extension capability became a reality, with funds flowing into the system from new state and federal legislative acts and grants-in-aid.

We need a major innovation within our system a la the historic period 1887-1914, which can happen when its time has arrived. We can profit from the lessons of our recent experience in the modest though transient success of prototype operations. The experience of our own illustrious past, and the record of present innovation-oriented firms can enable us to achieve a research and educational capacity which is in scale with the demands of people in our society. We can foster diversity in the style and performance of our university research and educational functions. To do so will require more than the marginal increments of faculty time. Some important faculty will need to devote their time temporarily to articulating and dramatizing the new

capability needed for social innovation. Many steps are needed but perhaps something along the following lines is required:

First, the Association of Land-Grant and State Universities needs to set up a developmentally oriented commission to improve the conceptualization of the function of using science for social innovation. Organizational questions are unanswered and the regional and national components need to be considered. The Association was very active with committees during the early development of the cooperative extension enterprise and counseled with congressional leaders of their time.

Second, there is a rising tide of public concern over institutional obsolescence. Many leaders are disenchanted with the "muddling through" process of institutional reform. Many areas of this public concern need to be made more visable and the people, including youth, helped to call on the university for research and educational support to meet their knowledge needs. The swine growers have done this with great success. The idea is to consciously enlarge the public support base for aiding research that is oriented to improve taxation, schooling, legal processes, waste disposal, etc.

Third, the Farm Foundation or some similarly interested support group needs, in the short run, to provide funds for enabling those universities which lead out to obtain counsel and to articulate for the benefit of others how they succeed, or not, in solving the many problems in their developmental task.

We can say for certain that if university leaders do not talk about how to achieve the capacity for social innovation and, if they do not try to conceptualize and organize to develop that capacity, then the capacity to use science in that way will not originate in the university.

APPENDIX

DETERMINANTS OF AN IMPROVING QUALITY OF LIFE IN CONTEMPORARY UNITED STATES SOCIETY

The quality of one's living is determined by a host of interrelated economic, social, cultural, political, psychological, and physical circumstances, any one of which can change in positive or negative direction. These circumstances which compose the quality of life might be subject to something akin to B. J. von Liebig's "law of the minimum." Applied in this case, the absence of any one circumstance considered indispensable to a quality life negates the influence of all others. Thus if one inhabited the most hospitable physical environment but lacked food, his life would be without quality. Another example is that of a man happily living in a satisfying neighborhood, who becomes discontented when a black family moves into the house next door. When this man's discontent becomes so great that he sacrifices his home and goes elsewhere, his life has lost quality. He loses his contentment because of his own hate, fear, and distrust and not because of any characteristic of the black family or of the physical environment.

It follows, then, that the above set of circumstances relating to the quality of life are socially dynamic; that is, they are moving, changing targets and they have a goal and value content linked to a resource content. This supposes then that an absolute quality of life would exist when the composite set of circumstances produced a life of complete satisfaction for everyone. This goal is unattainable but an acceptable degree of satisfaction can be maintained if persons feel that, on balance, progress is sustained toward the preferred or idealized circumstances. Catalogued below, but not necessarily in rank order, are some of these circumstances:

1. Growth in friendships and self esteem; reconciliation of hate, fear, and distrust. The constant enlargement of understanding and rationalization of self with the whole human kingdom.
2. Progressing individual productivity which supports desired growth in level of living (wealth). This level of living consists of a growing range and freedom of choice in the utilization of preferred amounts and quality of:
   a. Housing, food, clothing, etc.
   b. Communication, transportation, energy supply, etc.
   c. Avocation, recreation, etc.

3. Growth in the availability and quality, at acceptable per capita costs, of a range of public services, such as:
   a. Education for self renewal, creativity, and social enlightenment.
   b. Education for youth to develop human capital and culturalization.
   c. Governmental services for health, police, and fire protection.
   d. Public roads and transportation.
   e. Institutional systems for seeking, planning, and supporting desired ends in population growth, foreign policy, world peace, etc.
   f. A viable system of law, improved jurisprudence, and contemporary public codes.
   g. Etc.
4. A physical environment which is comfortable, beautiful, and variable and with control over hostile, unsafe, and disagreeable elements in the air, soil, water, sounds, and space.
5. An elected, representative, and responsive government which encourages new voices to be added to the decision-making process.
6. A growing individual and societal sense of hopefulness, individual freedom, satisfaction, and an anticipatory future of new experience. The conversion of uncertainty situations into risk situations.
7. Growth in the performance and quality of private services, such as:
   a. Institutional systems which foster greater incidence of human behavior which shows love, forgiveness, redemption, justice, and equity.
   b. Increasing choice and quality of consumer goods.
8. Other.

THE UNIVERSITY'S ALTERNATIVES

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Basically, the mission of the university is to improve the thought process of people and the level of knowledge with which they operate. This does not necessarily mean a high level of involvement in controversial issues and a resulting high fever on every campus in the world. The university may be getting more involved in more of today's life than it should. Many people are looking for whipping boys and places to thrust problems for which they have no answers. To make our universities a residual for all the social conflict in the world is a mistake, and the fundamental objective of these important institutions should be restudied. These institutions have had a somewhat specialized function over the years, and any basic change should be undertaken with proper care and study.

Let me hasten to add that a university must be alive. It must be cosmopolitan if it is to do its job. The means by which our cosmopolitan world interacts with our educational process is one of the great social problems of our age.

My comments will concentrate specifically upon the land-grant universities. I hope to sketch roughly some of the alternatives for the land-grant universities and their personnel. These alternatives will be sketched in a policy framework for choosing alternatives as taught to me by my two important tutors, J. Carroll Bottum and J. Byron Kohlmeyer. I will suffer the same fate as they inevitably do—that of having their favorite alternative discovered. If this occurs, I will feel that same delight that they try to hide. My alternative courses of action for the land-grant universities will be seven. Let us discuss each in turn.

1. *Specialize about their historical clientele—the agricultural and mechanical sectors.* Here I suggest that they take a narrow role concentrating on commercial agriculture. Let me say parenthetically that I will fade in and out with regard to agriculture versus the other functions of the land-grant school, but I am going to concentrate on agriculture. This would be a specialized but an advanced role. The role would be scientific and sophisticated, not vocational only nor technical only. Possibly this is already a satisfied clientele. I doubt it. It is not at all clear who will feed the world or educate the trades either in our affluent society or elsewhere around the world. This approach would

attempt to make American agriculture the model of the world and prepare rural kids for a productive and hopefully happy life.

This alternative is quite feasible. It is not absurd. However, it is not fashionable and lacks the general appeal of many of the other alternatives being proposed. A great danger is the probability that land-grant people will ignore this alternative and abdicate this to vocationally oriented state schools and give agriculture a second-class type of scientific and educational base.

2. *Specialize about the type of education that they have pioneered —applied, people-needed, and mission-organized.* This would probably mean that they would preserve their historical organizational mix of research and education. They would educate the commercial types. They would be prone to shift resources socially, and they would be service-oriented to a personalized clientele. But this would probably not be an agricultural or mechanical clientele.

To define priorities for new clienteles is extremely difficult. It would be even more difficult to limit the number of clienteles to get efficient use of resources. Even with a much more widely expanded resource base, this would still be a problem. It might help some if we could seek related clienteles first, but this is not at all clear. It would help some with this approach to stay somewhat specialized and shift only nominally with regard to clientele, but the alternative assumes a shift in clientele.

A paramount reason for this alternative is that we have great expertise for the types of problems that plague today's society. This expertise apparently is transferable both domestically and internationally. It is an extremely scarce resource in our society. We must not scuttle this institution that has so much expertise at the very time the demands for special expertise are at the apex.

This alernative is feasible and attractive. It might mean more emphasis on method as contrasted to subject matter. Our method has been successful. This alternative is difficult to define and much more difficult to manage than alternative one.

3. *Diversify their program coverage, educationally and service-wise, about their historical clientele.* This would mean stripping away the commercial constraints and not worrying that agricultural schools were set up primarily to foster agricultural technology. Agricultural economics has already eroded this concept. It would mean expanding the number of disciplines that would be applied to agriculture. Areas such as law, merchandising, and group behavior would be brought to bear on agricultural problems. Rural poverty and foreign trade would

get greater emphasis. It could mean greatly expanded resources and an overt attempt to diversify the source of funding. This would provide some assurance for agriculture, which cannot protect its funding in traditional ways. In its minority position agriculture just cannot carry the weight it has historically.

This would probably mean greatly expanded interdisciplinary studies. It would obviously shift resources from the production areas to the social areas. It would broaden the international aspects of our work. It would consider much more directly the externalities in agriculture.

This alternative is feasible. Resources to fund it will come hard, and it has all the dangers inherent in specializing on a minority group. The burden of selecting this alternative rests on the case that agriculture needs specialized treatment in an exchange society. It also requires a considerable shifting of emphasis from the technical to the social. So far, agricultural administrators have been unwilling to make such a shift, particularly in the research area.

4. *Diversify clientele-wise but stay program-wise with the core of the land-grant model of education, probably adding some new programs.* The relative number and types of disadvantaged are more obvious now than when agriculture and mechanics were singled out. Actually, the demand for service by the disadvantaged is insatiable. Many could use the services of the land-grant system. Interestingly, commercial agriculture at this time needs the land-grant system much more than the land-grant system needs commercial agriculture.

Problem similarities are striking and even more complicated and diverse for each new clientele than they have been for our historical clienteles. Funding possibilities here are attractive. Acceptance by many of these groups would probably come quickly and would be quite satisfying. The leadership for education in several of these clienteles might well drop in our laps. This would probably mean adding several new types of programs which could conflict with traditional academic priorities. These would involve issues such as service bureau type of programs, direct consulting both by individuals and for total programs, brokerage functions in the educational field, specialized programs such as vocational training, and interdisciplinary efforts where the function would be primarily organizational so far as the land-grant personnel were concerned.

This alternative is feasible, but it will take much organization and discipline. There would have to be a vigilant effort to improve programs and conventional institutions. Land-grant people would be

competing directly with others for clientele. They would run risks of being overexpanded in too many areas.

5. *Establish an alternative that would be a combination of alternatives three and four.* This is basically what we are doing now. Frankly, without a wider fund base or more efficient resource use, we are inevitably weakening our programs. The greater diversification of program and clientele can mean only a watering down with current resource probabilities and current ways of using our resources.

The great problem here is lack of appropriate and adequate guidelines to assure that we diversify only so far as we can specialize. The organizational arrangements in our traditional land-grant school are inadequate from a managerial point of view to do a good job of this alternative.

This alternative could be discussed in considerable detail, but I will try to turn some of the problems here into a positive nature in my last alternative.

This alternative is probably completely unsatisfactory. It likely is not socially acceptable and would lead to serious depreciation of the land-grant status, respect, and effectiveness.

6. *Disband the land-grant institutions and let society shift these resources to a new institution.* Education evolves out of the conditions of its time. So does an establishment. Increasingly, it is becoming apparent that there will be great argument in this country about disbanding proven establishments for completely new ones. The alternative is to alter and work within the current establishments. My bias is to alter establishments unless it is clear cut that an absolutely new one is needed.

This alternative is not feasible. The establishments have proven themselves. They are part of our society. They have certain partisan vested interests that are probably justifiable from a social point of view. They are viable. The personnel are a unique resource, extremely valuable for current problems.

7. *Reorganize the land-grant resources in such a way as to maximize their contribution in one of the above alternatives or some combination of two or more of them.* Possibly you will say that this is a slightly different order of alternatives. Regardless of whether it is or not, it has to be considered before you can choose properly among the above alternatives.

The current land-grant university organization is lacking. Top and middle management is often weak. These schools have developed

a tremendous bureaucratic organization, and this is becoming worse and worse. The scientific focus on management is weak. The somewhat "folksy" idea of a land-grant school has given it an operational technique not too unlike that in many churches. This is inadequate for the large-scale, large-budget, and complicated organizations of today. A multiheaded responsibility has developed in the organizational scheme. An academic sophistication impedes efficiency. Policy and operational techniques are poorly defined. Uncertainty is killing staff and department head efficiency throughout the system.

Only a strong growth industry such as education would permit the existing institutional deficiencies. The formula type of funding inherited in the land-grant system tied into our state-oriented politics has led to a failure to optimize that the public can no longer afford.

There has been essentially no market analysis for the products of our land-grant schools, and there is little raw material selection, quality, and control.

The land-grant school organization has had a conservative bias due to the fund sources and clientele with which it has worked. The fund base in these universities is narrow, and it is a shrinking one. Unless strong work is done to diversify the funding base, these institutions are going to be in real trouble. There is now public accountability of a type that the land-grant schools have not had before. Any type of solid evaluation will show that this organization still has great assets, but it is going to take management and a much stronger demonstration of appropriate use of the resources entrusted to it if it is to survive in its traditional strong posture.

The organization has some great assets. It has people of great dedication and a feel for important current problems. It has excellent facilities in many cases, including buildings, formula funding basis, and contacts with many of the powerful people within the state. It has a philosophy of working together, a solid loyalty, and a general philosophical thrust that is not true of most other academic groups. It is a manageable establishment. It is not so large but what it can be managed, and there is still plenty of opportunity to see that it is managed.

This alternative would subject the institution to an analysis of its appropriate level of program and its appropriate specialization with regard to clientele. The basic constraints under which this analysis would be performed would be somewhat as follows.

First, market would have to be examined. The clientele for our particular programs must be considered. Many of our traditional

Cooperative Extension Service programs no longer have a clientele. Many of our Ph.D.'s probably do not have a strong market. Much of our research is for a narrow clientele that probably does not want the research or does not need it. On the other hand, there is a strong new group of people who want the types of programs that the Cooperative Extension Service can provide. A careful analysis might show a much greater need for the land-grant schools to be turning out Ph.D's in agriculture than B.S.'s. Well coordinated programs of tight discipline orientation and research would probably make a lot more sense than going in a broad general direction.

The processes must be considered as a constraint in any analysis. The limits of controversy must be considered. The involvement in public decision making is an obvious part of this, but a movement into straight controversy, without some overt reason, appears unwarranted. There are the limits of time. There are the limits of resource and development, and many other in-house needs that must be considered. There is a strong need in the process to consider the importance of preserving the interface between people and program at the departmental level. Movement away from departmental organization should come only after serious study.

The objective function of the universities must be considered as an important part of the analysis. There appears to be a need for a much improved product line with specialization around the thought processes and the development of a greater body of knowledge. The analysis of Bonnen where he shows three circles of influence for the university in teaching, research, and public involvement is a good one. However, I seriously question whether the university should move vigorously into the public involvement sector. I feel that teaching is the great function of the university and that the research function is necessary to keep it viable and alive. This does not mean that I would pull in my horns and do nothing but these key functions. On the other hand, I would have the university take on the change agent function primarily to improve the education and research. I recognize that, to some extent, this may be heresy in this group, but I feel that it is a question worth asking.

Some of the constraints involve questions of product definition. It is time we face up to the difference between community development and agricultural policy. We should face up to the issues of applied economics as contrasted to agricultural social sciences. It is time to talk seriously about the difference between multidisciplinary work and interdisciplinary work. The whole notion of joint products makes these definitions extremely important.

I like the list of characteristics of successful educational systems as laid out by Bonnen. They need to be applied to the organization of the land-grant university. Some of his success criteria raise real questions. He talked about programs and their development. The whole notion of technology as contrasted to technocratic structure and thrust as developed by Galbraith is important. He talked about institution building. It struck me that institutions are always being remodeled. We seldom look at the actual cost of that remodeling. He talked about a delivery system. Salesmen have always been highly paid in an exchange society. We must evaluate this function particularly as the system changes. He indicated that there should be a cónscious, planned thrust. Evolving land-grant systems must be more definitive in goals, organization, and objective functions. He indicated that choices must be made.

In part, I am saying that these issues are so paramount within the organizational structure itself that emphasis on alternatives for the land-grant schools should be on reforming their own programs before they attempt to reform society. This would mean some tight assessment of the tendency of our land-grant schools to turn themselves more and more into action or change agents in society. This would result in a refinement and improvement of their historical functions of teaching and research. In such a way they will maintain the strength that comes from bringing expertise to bear on public decision making. They have the expertise and I want them to use it. But, I do not want them to lose it in the process.

PART II

Policy Issues for the Seventies

EMERGING ISSUES, POLICIES, AND PROGRAMS FOR THE SEVENTIES

Don Paarlberg
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In terms of agricultural policy the question today is: *Who is making the decisions in agriculture?*

There were many years when it would have been idle to ask such a question because the answer was evident. It was the farmer who made the decisions: What to plant. How many animals to produce. When, how to sell. How to use his resources. In the farm policy field there also was an easy answer to this question. The decisions were made by the farm bloc of the Congress with the aid of the farm organizations, the Department of Agriculture, and the land-grant colleges. And it would have been idle in those days to ask who was making the policy decisions in agriculture. True, there were some disagreements, differences. But on the whole, the decision-making process was rather well specified.

But agriculture has been going through some enormous changes. We have been experiencing an agricultural revolution. The farms are bigger. They are fewer. They require vastly more capital. They use much more technology. New managerial forms are emerging. There are new ways of managing agricultural resources. There are contracts. There is vertical integration. And the farmer finds some of the decisions now being made by people off the farm.

Agriculture is losing its uniqueness. There was a day when agriculture was different, distinguished in a marked fashion, and in a preferential way, from other sorts of activity. The farmer was the cornerstone of democracy. Agriculture was not just a way of producing crops and livestock; it was a way of producing people. It was a good way of life. And everything in agriculture was different, meritoriously so. But this has been changing, and agriculture is entering the mainstream of economic and political life in this country. The things that distinguished agriculture from the rest of the society are gradually becoming blurred.

I can remember when it was a matter of pride with farmers that they could distinguish themselves from other people by dress and manner. But now I hear farm people saying pridefully that you can-

not distinguish a farmer from anybody else. They look and talk and behave in the same fashion.

This means that some of the unique qualities of agriculture are in the process of change. Historically, the economist would say that the farm operator provided himself, in his own person, all the productive resources that were used on the farm. He provided the capital, the land, the labor, the management.

The modern farm is very large and requires an enormous amount of capital, a great deal of managerial skill, and much labor. It is harder for the average person to find bound together in himself all these resources.

So the factors of production formerly all supplied by the farmer are now being supplied in some degree separately by different people. And the one thing that is very precious to the farmer—the decision-making prerogative—is to some extent also up for grabs. What farmers are trying to do is to hold on to that very special prerogative. They may have to borrow their money, even though they do not like to do it. They may have to rent their land—maybe they cannot own enough land. They may have to hire their labor. But they do not want to give up that decision-making function.

Of course, there are some exceptions to this. We have seen the broiler industry transformed, with the operator becoming a sort of piece worker, or a wage worker. And there are questions whether this style of operation is going to move into other sectors of agriculture, whether agriculture is going to become like bricklaying, or like taxi driving. Who can tell?

This is something about which farmers are very much concerned, and you know that from your close association with them. There is a struggle in the new form of agriculture that is emerging to see who will be making how many of what kinds of decisions. There is a long list of contenders. The farmers themselves are trying to develop new techniques for retaining the decision-making function. They do this with bargaining groups, new kinds of commodity associations. They are restructuring their cooperatives, and are trying to learn how to retain for themselves the decision-making prerogative.

Agribusiness firms are trying to take over the decision-making function. Nonfarm corporations are venturing into agriculture, financial interests are supplying the capital and trying to supply the decision-making function with the capital. Food processors and retailers are trying to restructure agriculture in order to have control of the time of delivery, the quality, the grade, and the volume, in order

to adapt the inflow of agricultural products into the new merchandising institutions that are arising. Labor is trying to take over a larger role in the decision making within agriculture. Those of you who are from the far West will be particularly aware of this. There is an effort to unionize farm labor to convey to labor some of the decision making concerning the manner in which agricultural commodities are to be produced and harvested.

Government is venturing into the decision-making forum for agriculture with pure food regulations, with environmental quality control, with pesticide regulations, and with programs that prescribe how much and what kind of agricultural commodities are to be produced.

It is like Jimmy Durante says, "Everybody is getting into the act." But the question of who makes the decisions in agriculture is an essential one.

Farmers ask themselves, where should we fight this battle? How much of this battle should we fight in the marketplace? How much of it should we fight in the legislative forum? Obviously they have to make the fight both places. When you decide where you are going to fight your battles, you want to know something about the strength of the base from which you elect to fight. The question is how much of which battle do you fight in one place and how much of which battle do you fight somewhere else. There is a change under way in the farm policy format.

I think the best way I can characterize this change is to outline what I shall call the farm policy agenda committee. I mentioned before that farm policy is developed and decisions made within a group of institutions. One of these is the farm bloc in the Congress, another is the Department of Agriculture, and another the farm organizations. Then another is the land-grant universities. The land-grant universities do not think of themselves as policy-making institutions, but they train the leaders, they are part of the thought process, they are the intellectual elite, they have their role.

For long years the policy agenda committee had almost undisputed control of shaping the farm policy format. They were pretty well able through the years to keep off the agenda those items they did not want to see considered. It is true that they could not always get enacted the things they wanted to see enacted, and they had their quarrels among themselves. But they were agreed on one thing—they were the agenda committee.

Now this is changing, and I think I can illustrate it best from my

own experience. I was in the Department of Agriculture during the 1950's, and at that time the agenda committee was pretty well in control of the farm policy agenda. They had put at the head of the list the commodity programs that dealt with price supports and production controls for the major crops. They had some trouble getting enacted the kind of legislation they wanted, and there was some disagreement concerning just what was wanted. But nevertheless, all were agreed this was the top farm policy item.

But what farm policy issues have occupied the Secretary and his people during the last year and a half? One item is payment limitations: How much money is going to be paid to any one person under these commodity programs? Now you can be sure that the old agenda committee did not put that on the agenda. That was put on the agenda by nonfarm people. Then there was the banning of DDT. How did that get on the agenda? Well, the old agenda committee did not put that one on either. That was put on by the conservationists.

Unionizing farm labor is an issue. That was put on by Caesar Chavez with help from the labor unions, the churchmen, and the academic community. Civil rights in the administration of agricultural programs—how did that get on the agenda? That was put on by the Civil Rights Commission, with help from many interested people. Problems of the rural poor—did the agricultural committees put that on the agenda? Oh no, that was put on by the Rev. Ralph Abernathy, with help from a number of others.

Food for the malnourished, how did that get on the agenda? Well, that got put on after a CBS documentary and a special study by a number of private citizens and by a select committee of the United States Senate. There is no question but that this has been a top question of agricultural policy. Allegations about the high price of food, how did that get on the agenda? Again not by the old agenda committee. That came up because of the interests of private citizens, the consumers of food who find large numbers of people to express their views. Allegations about the unwholesomeness of food and about the effect on human health of the use of tobacco—who brought that up? The medical profession.

Meanwhile the Secretary and the farm organizations have been trying to get the Congress to act on the old agenda items—price supports, production controls, income payments for the major commodities. And with all the other issues, they have not got the job done, though passage of a farm bill is in sight.

What comes through if you look at this objectively is that the old

agenda committee no longer has control of the agenda to the degree it once did. Farmers are losing control of the farm policy agenda. That is significant, and so is losing the initiative. If I have learned anything from watching all those football games, it is that you do not score points unless you have the ball. But worse than losing the ball, is to lose the ball and think you still have it.

We have many problems in agriculture that call for enlightened and sympathetic understanding and an intent of helpfulness by government. But we cannot get these effectively before the people unless we have a considerable input in the shaping of the agenda. Something else that I learned by being in the college is that the most important committee on the faculty senate is the agenda committee. They decide what is going to be discussed and the terms under which it is to be discussed. One of the most important committees in the Congress is the rules committee, which is really an agenda committee. They decide what items are going to be discussed and under what rules. And the most important group in farm policy is the group that defines the issues. We in agriculture have to consider how to get a bigger input than we have had in recent years in the agricultural policy agenda.

Now we might speculate a little about how it is and why it is that we have been losing influence. Certainly the loss in political power is a big item. When I was a boy, 25 percent of the people were living on farms. Now the number is only 5 percent. The loss in political power may not have been exactly proportionate to the shift in the rural-urban balance, but it has certainly been substantial.

There also has been a loss in image. I described earlier the fact that the farmer is losing his uniqueness. The early idea was that the farmer was especially meritorious. Now, he is just a citizen like everybody else. The city limits sign which once was the line of demarcation between two cultures has become increasingly just a line that divides two units of local government. The earlier notion that the farmer was the cornerstone of democracy, that he was uniquely productive of the truly worthwhile things, has been blurred and with it have been lost some of the favorable attitudes that once prevailed toward farm people.

In addition, certain of the farm programs with the very heavy payments made to a limited number of individuals have created an adverse reaction toward farm people. I do not think we can turn out statements, publications, and radio speeches that are going to alter this in any fundamental sense. What we have to do is to favorably represent the farmers to the people of this country and to make it as clear as possible that farmers are efficiently producing the most needed

commodities, that they are providing the public the best diet any people ever had, at the smallest percentage of the consumer's income. This needs to be said again and again and again. You are helping to say it. The Secretary works at this constantly. But I do not think this is going to be enough. I think people are going to expect to see some fundamental changes that are more than cosmetic in nature. They are going to insist on some program changes, insist on our doing things differently in agriculture from the way we have long done them. The payment limitation in the new farm bill will help.

Another development prompting this change is a growing interest in the people left behind. Here I want to talk plainly, perhaps more plainly than you are accustomed to hearing. I look at the programs of the Department of Agriculture and the land-grant universities to see which people are benefiting from these programs. I find, and I think you will have to agree, that these are by and large the better farmers whose incomes are already above the average. That is the way it has long been. But the climate of public opinion in this country has changed, and I do not think that our present approach is good enough. We are under criticism in agriculture and in our agricultural organizations on this point. This is making some difference in our attitude toward what to do.

Furthermore, the commodity problems for corn, wheat, and cotton are now thirty-five years old. We still do not have the answers, and people are growing weary. How long can you keep a public policy issue before the American citizenry without resolving it? There is some sort of limit to the attention span of people with reference to a public policy issue. I do not know what it is. What I am saying is that the farm policy agenda is in need of some reshaping, and that these changes are being forced on us.

Now, what to do? I think we must take into account the legitimate interests of nonfarm people in agricultural affairs. We are now a minority—5 percent of the population. When you are a minority, you have to act like a minority. When we were numerous and powerful in the farm policy area, we could decide what to do, and often we could do it. We got in the habit of thinking that way. Earlier we could afford quarrels among ourselves—we could afford to disregard nonfarm interests. But the situation has now changed, and this is no longer true. What we must do is broaden the base of public support for agricultural programs, for agricultural issues, for agricultural people.

Rural development is one base for broadening this support. It is concerned not only with the problems of the large-scale farm op-

erators, it is concerned also with the well-being of the smaller farm operators. It is concerned with the well-being of nonfarm people who live in rural areas, with the well-being of those people engaged in farm service of one sort or another who may not themselves be producing farm products, with the well-being of people in the small towns and the villages in rural areas. It is a broad base.

I have been surprised to find during the last year and a half in my second tour in Washington that city people appear more concerned about rural development than rural people. The city people are beginning to say to themselves: "Look, we have these enormous urban problems; what has caused them and what is causing them?" They realize in part that they are caused by people who leave the rural areas where there is no employment opportunity. They move to the cities in enormous numbers, with poor education, without vocational skills, ill suited for the urban environment. They arrive in large numbers, are unassimilated, and there are all sorts of problems. Now city people are beginning to say it might make more sense to try to solve this problem in the rural areas, to develop some job opportunities for these people out where they want to live among their friends and neighbors.

So if you add up what is being done by what we call the urban departments of government to create jobs in rural areas and to provide better living conditions, better housing, better sewers, better water supply, better roads, better services, better health, the total comes to more dollars than if you add up what is being done by the Agriculture Department. When you add up what is being done by the Department of Health, Education, and Welfare, by Housing and Urban Development, by the Office of Economic Opportunity, by Commerce, and all these others, you find they are making a bigger input in rural development than are the Department of Agriculture and the institutions that we regard as rural oriented. Now that is something to think about. It is symptomatic of the broad interest in these problems, albeit not yet a very broad interest on the part of the old farm policy agenda committee.

Environmental improvement is another possible base for broadening public support for what needs to be done in agriculture. In rural areas, we have more acres of environment than anybody else. Those who have been thinking of environmental issues as a fad are, I believe, mistaken. At this stage of development there are some unfounded emotional outbursts. But these are symptomatic of a deep and legitimate public concern. With the passage of time these concerns will settle down and focus on issues of real substance where intelligent efforts can be made. Do not write that one off.

Broadening the base of public concern in the farm policy area will have two merits, as I see it. First, it will refocus our efforts in areas of real need. Second, if we do refocus our efforts in areas of real need, we will win the public support we need to attack the parochial problems of agriculture—the historic problems of price supports, production control, and income payments for the commercial end of agriculture.

We need to take account of the legitimate interests of nonfarm people in the farm policy area. We need to try to broaden the base of support, and to work at private efforts to retain decision making. We need to improve our cooperatives, so that farm people can continue to make the decisions about how to use this institutional resource, so that the decision-making function will not be rustled away from us by agribusiness firms, or by integrators, or by the financial community, or for that matter by government. We need to work with bargaining associations. We need to try to develop innovations in contract bargaining and integration to help keep decision making in the farmers' hands. No integrator or agribusiness firm is going to develop a contract that preserves for the farmer the decision-making prerogatives that the farmer wants. Farmers themselves have to make this input through their own bargaining associations, or through the help of their land-grant universities or in whatever way may be possible.

There is the danger in effectuating or writing about any kind of public policy work of perpetuating the old issues. They are historic, deeply felt, and known to everybody. So the temptation always is to deal with the same old issues. I think that this is a mistake. A responsibility and opportunity of enormous potential is lodged with this group. You can accommodate the new and, I think, constructive mood of America, to help reshape the farm policy agenda, to de-escalate commodity programs, now thirty-five years old, and to try to accommodate a growing public interest in problems that have not hitherto had as much attention as perhaps they should. You can help shift the focus of public policy into the new avenues toward which it is reaching.

In large measure the broadening of the base of farm policy issues that I have tried to describe is itself evidence that you have already been redirecting attention into these areas. Or, at least, you have been articulating the changes in the farm policy agenda that I have tried to describe. You have a special opportunity to give support to the sincere efforts of our farm people to try to hold on to the most precious of all their possessions—their decision-making power. Con-

ditions are in a state of change and there is the opportunity for us not only to witness this change but to help articulate the new emphases that are developing. We who have had special awareness of the important evolving pattern of agriculture should take advantage of this opportunity to participate in what I think is the first major reshaping of agricultural policy within a generation.

ISSUES AND PROBLEMS OF IMMEDIATE CONCERN

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To treat the assigned subject involves forecasting the future public policy issues of concern to agricultural people. I shall try to forecast some of them. No one can fully see the course of events in the future, and I know that in the decade ahead new issues will arise which none of us here today will foresee. Nevertheless, I am equally sure that some of the issues I am discussing will be issues in the seventies. We can prepare for these and take the others as they come.

Issues at both ends of the national and local spectrum have been omitted from this statement. National issues, highly value oriented and considered by the mass media, such as law and order, drugs, and death on the highways, have been omitted. At the other end of the spectrum a myriad number of local community issues, such as hospital facilities, libraries, and recreation, have been omitted because they are problems of concern to limited areas. This statement has largely been confined to national and state issues in which economics has a significant weighting in the total decision-making process.

Let us look first at the group of issues that will be of particular concern to commercial agriculture and then at those that will be of concern to rural people and all other members of society.

The total resources committed to agriculture continue to exceed those necessary to meet our domestic and foreign needs in the decade ahead. We all know that we have excess human resources in agriculture. We all know that during the past decade between 50 and 60 million acres of cropland out of a total of 450 million acres were retired. The nonsense expressed by many in the early days of land retirement that this reduction in acreage had little effect because land comprised only 15 percent of the inputs in agriculture has been pretty well dissipated. We know now that this land taken out of production has an average productivity of 80 to 90 percent of that which is now cultivated. Barry Flinchbaugh has just completed a study in central Indiana which indicates the land taken out of farms in central Indiana, according to its location on recent soil maps, has 90 percent of the productive capacity of the land being farmed.

How this presently idled land shall be used will be a growing

problem. We will eventually move to a land conversion program. Thus, we will have a continuation of the issues surrounding programs for retiring land and also for facilitating the transfer of human resources out of agriculture through training and other inducements.

I see a continuation of the struggle for markets for agricultural products in the decade ahead. Trade issues will continue. Approximately one-sixth of our agricultural products are being exported in competition with many other countries, with special arrangements for moving their products in the export market. I see an issue arising in the United States of what kind of a mechanism we are going to use to increase our exports in this very unsettled world market. I am not saying that the development of marketing boards is an answer, but some mechanism that allows us to do more effectively what some of the countries like Denmark, Canada, Australia, and others are doing will be an issue.

Domestically bargaining power and pricing for agricultural products will continue to be an issue in the seventies. The reduction in the number of buyers and sellers of agricultural products and the drive for greater efficiency in the physical movement of the commodities will keep pressure on this area.

Now let us turn to some of the more general policy questions that wili be of concern to all agriculture and to all citizens.

Population control and location will be on the policy agenda in the seventies. How far should government go in modifying population growth? How far should it go in modifying population location? Do we shape government policies to continue the consolidation of population in a few general areas through the development of rapid ground transportation or do we shape them to disperse the population more widely throughout a major part of the United States? We have the choice of going either way.

It seems inevitable that we will have a modification in our welfare program in the near future. Both Democrats and Republicans are agreed that we need a change. I think we will have a family assistance or negative income tax type of program for all low-income people. This will put a floor under their income, but it does not solve the problems of the disadvantaged in the rural areas. Their fundamental problem involves individual development. It involves their technical, economic, social, and political development. This is a long-run problem, and many issues will be raised concerning how such programs should be conducted. It would be convenient if the problem of the disadvantaged could be solved by just giving people money, but those that dig below the surface recognize that much more is involved. We

have the job of opening up society, developing the individual, and making him a part of the total society.

No one questions but what we will have, for a time, numerous continuing issues in the pollution area. It raises a whole series of issues and not just one broad issue. In agriculture we have the water pollution issue involving livestock, fertilizer, and herbicides. We have the issues of insecticides, antibiotics, and odors from livestock. The disposal of solid wastes is now an issue in most areas.

The issue of price stability versus fuller employment will reach critical proportions at various periods in the next decade. Issues of how best to increase employment and how to check inflation will continue to rise. In my judgment, more than 5 percent unemployment or more than 5 percent inflation are unacceptable conditions in our society.

At best, we will likely be in a period of uneasy peace in the world during the decade. Issues concerning our stance in the world and the extent of our commitments abroad will arise. This will involve the amount and placement of our military and economic aid and commitments.

At the state level, the problem of shifting more of the tax burden from real estate to sales and income will continue to be an issue in many states. It will involve such questions as what should be the tax structure and the tax expenditures. The issue of the federal-state relationship in the tax field will be a continuing one. How far should we go in collecting taxes at the national level and refunding them to the states, and what restraints should we put on the expenditures?

SUMMARY

Thus, some of the issues which we will be facing in the seventies are farm programs, land use, bargaining power and pricing, international trade, development programs for the disadvantaged, population control and location, pollution, price stability, and taxation. Others will arise that cannot be predicted at this time; however, if we get ready for these, we will be in a position to take care of the new ones as they come.

ISSUES AND PROBLEMS OF IMMEDIATE CONCERN

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The focus is still somewhat blurred as we struggle to put public policy education into perspective for the 1970's. The 1952 publication, *Turning the Searchlight on Farm Policy*, stated that public policy relating to agriculture must be based on sound principles and long-time objectives if it is to serve adequately the interests of the farm people and the general public. On what priorities should we turn the searchlight in the 1970's?

In the 1950's and most of the 1960's, our basic focus was on agricultural policy for commercial farms. I do not think that agricultural policy makers or we as agricultural economists have been completely honest with people in rural areas and with the total public. We have not told the whole truth about the effect of agricultural policies on economic development and what this has meant to the poor living in rural areas and to the small family farmer. There is a truth here that no one likes to hear. Past policies have not provided much help for the very people that they were designed to help. The results of these policies are that social costs have been substantially higher than the benefits that have accrued mainly to a relatively few of the larger commercial farmers.

Changes in our society have altered the opportunities and responsibilities of those of us who work in public policy education. The related and interdependent problems of our states must be tackled with a realistic orientation to the economic and social relationships of the 1970's.

COMMERCIAL AGRICULTURE

We have long sought the overall goal of providing an abundant supply of food and fiber to meet domestic and foreign demand. Policies which bring income gains to farmers in the marketplace by reduced marketings mean higher prices to consumers and impose constraints on freedom to produce, which some farmers resent. Current policies adjust output and encourage participation by diversion and price support payments, which improve farm incomes at the expense of taxpayers. The "feed the world" notions have been ruled out. Excess

capacity in U.S. and world markets demonstrates that technological progress in agriculture is likely to continue to outdistance the growth of domestic and effective export demand.

No panacea exists for the ills of commercial agriculture. Policies characterized by voluntary land retirement programs with diversion payments and market clearing prices will continue. The policy focus is on land or people, or some combination of the two. We have had three decades of discussion and experimentation with programs designed to adjust the use of land resources. Policies designed to adjust the supply of human resources in agriculture will increase in importance in the next decade.

THE RURAL POOR

Thousands of rural people own few resources other than their labor. They find that their earnings are not sufficient to meet their aspirations, and many are poor. The real gap is between aspirations and the means of fulfilling them.

We have devoted much of our energies to studies of individual farms, marketing firms, and commercial farm policies. However, the plight of the small family farmer and poor people living in rural areas is not alleviated by most farm programs. Commodity programs aid those farmers who have the most to sell, and the largest diversion payments go to those with the greatest capacity to produce. The march of technology has, in a real sense, condemned the farmer with few resources to a meager farm existence and low income. Policies such as job training, better education, and development of new industries in rural areas would help these families but would not solve the problems of commercial agriculture.

Public policies to combat rural poverty potentially conflict with policies that accelerate overall growth and development. The cost to the public of eliminating rural poverty would be staggering, and in nearly every case, practically unacceptable. The public policy issue becomes one of priority, emphasis, and degree in the use of public funds rather than instantaneous elimination of poverty in rural areas.

LAND USE PLANNING

As we enter the decade of the 1970's, we must focus on the role of area planning as an instrument of public policy that will affect the development of both nonmetropolitan areas and metropolitan areas. The major function of regional planning is to carry out a continuous and coordinated plan for efficient use of an area's scarce resources.

Although the nation's population is largely urban, residential patterns have changed dramatically over the past twenty years. There has been a rapid expansion of trade and jobs outside of central cities. This suburban explosion has created perplexing problems for the unprepared county. High levels of public services are now demanded by the affluent new residents and industry. And this has painfully strained the financial resources of local governments. Federal grants for community services have provided only partial relief.

Land is a limited natural resource, while demands on its future use appear unlimited. Any method to take full advantage of this scarce resource requires long-range planning.

In many states there is increasing active cooperation between state and local governments in area regional planning. Area planning staffs can influence decisions on capital investments, zoning, planning, and public facilities. In addition, private decision makers have begun to take part in implementing area plans. They use the information developed by the area planning staff to determine the location of new plants and shopping centers, and through these decisions carry out the planning goals of the area.

These policies can have as large an impact on rural America as price and income policies. Land use and water pollution problems spill over political boundaries and have an impact on smaller nonmetropolitan communities and rural areas. We have the inside track on influencing current owners of the land resource in their decision on area planning. This advantage will mean little if our focus is blurred by our "helping the farmer" image, and we fail to grasp the total meaning of these public policies to *all* our citizens.

TOUCHING BASE

Most of us who have worked in public policy education have developed a clientele with whom we touch base. An ability to touch base in terms of ideas and policy proposals has greatly increased our creditability and performance as policy educators. While we influence the thoughts and actions of our clientele, they also influence ours.

Are the clientele that we have touched base with during the 1960's adequate for the 1970's? Probably not. Our clientele for the 1970's will be key community leaders who have a feel for state-wide issues. State government will play a much more dominant role and will need to deal with such public policy issues as area planning, financing and taxation, pollution, and job opportunities. The challenge is for each of us to develop effective means of reaching these leaders so that our educational programs can continue to be sound and relevant.

FOCUS ON OURSELVES

In the 1970's, problems of job opportunities, poverty, pollution, and environment will have a significant impact on nonmetropolitan areas. When the frustration of being unable to create a more livable area begins to outweigh the fear of loss of political power, individuals and groups have shown increased willingness to cooperate on region-wide problems. The typical city-suburban-rural rivalries which have hamstrung area cooperation are being broken down, and significant progress will be achieved in the decade ahead. How should those of us who work in the policy area prepare for these new policy issues?

One response might be, "Have methodology; will tackle problems," and in a sense, this is what we have done on many issues. The success of this approach is unclear since we tackle problems that are outside the field in which we have our background and training. We must stretch our imaginations to meet the challenge and opportunities of the next decade. We must follow a policy of providing opportunities rather than inhibiting them. Today rural people face much different and, in some respects, more complex adjustment problems than ever before. No longer are farm and city separated by easily identifiable boundaries. Programs in public policy education must meet the needs of a restless society and can no longer be built on a foundation of rural nostalgia.

PART III

Income Maintenance Programs

GOALS AND OBJECTIVES OF INCOME MAINTENANCE PROGRAMS

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Enlightened public opinion in general and government policy in particular have come a long way from those days when it was believed that the market mechanism, if left alone, would provide for a maximum of social welfare.

The normative branch of economics—welfare economics—recognizes that public policy should interfere with the operation of the market mechanism, but only with the aim of making it more efficient. In this sense, then, welfare economics is concerned primarily with *economic welfare* rather than with social welfare at large. It operates on the underlying norm of *market efficiency* in the narrow sense. Economists have generally been more than reluctant to make pronouncements on the goals or objectives of any policy aimed mainly at redistribution of income. This was held to be the legitimate field of the politician, or of other branches of the social sciences, and not a proper subject for economic science.

An emerging subdiscipline of economics which recognizes the need for control of those processes not regulated by the price mechanism is called the "welfare economics of interdependence," or "grants economics." Grants economics is concerned with equity and other goals as integral parts of economic inquiry. It says that the aim of public policy is not only the attainment of economic welfare but social welfare at large. It postulates that a variety of economic instruments available to the public decision maker should be used not only to improve market efficiency or to obtain economic stability but also to promote growth, equity, system maintenance, and integration—or what may be termed *general efficiency norms*. The discussion that follows will deal with income maintenance primarily within the terminology associated with this subdiscipline.

Apart from the mainstream of economic inquiry, the theory and policy of public finance has always recognized the need to redistribute income over and beyond the pattern resulting from market operations. The government has considered policies designed to enhance income in time of adversity, an important part of public policy, particularly since the 1930's. However, the package of social security

legislation developed in the past thirty-five years seems to arise more from a philosophy of providing income in situations of temporary inability rather than from a general policy of income maintenance outside the logic of whatever the market mechanism may allocate to a particular individual. Examples would be found in unemployment support, clearly a short-run measure, as well as in old age pensions or social security. The latter might be considered intermediate-run measures in the sense that they do not span the entire life of the individual.

Today we notice an increasing shift to a philosophy of "income augmentation" for the long-run betterment of the social welfare of the population. The extreme philosophy of income augmentation is found in the variety of proposals for a guaranteed income or a negative income tax, which have gained increased currency among serious economists and public policy makers.

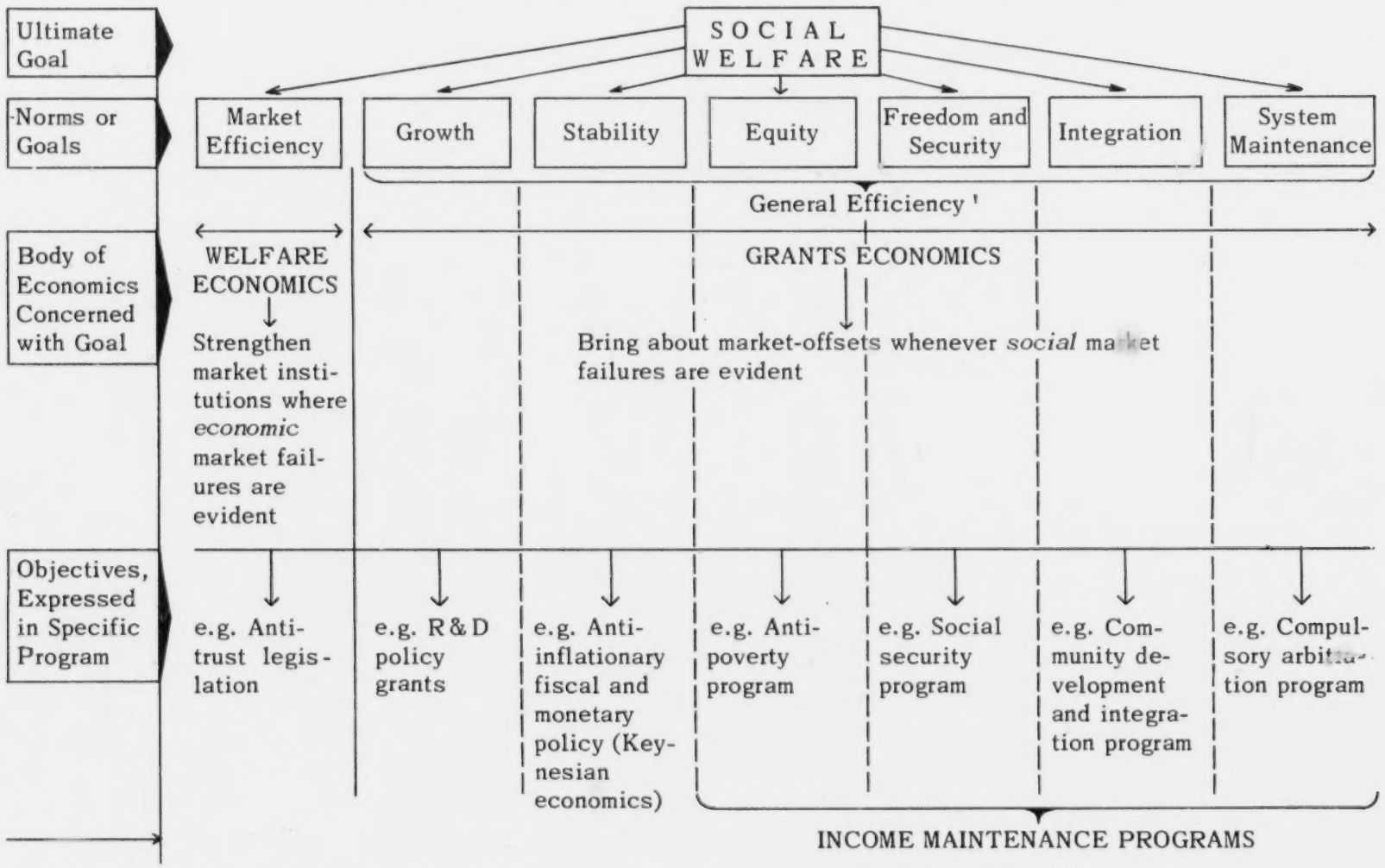
THE POLICY SETTING FOR INCOME MAINTENANCE

If we consider a *norm* or *goal* as an end toward which effort or ambition is directed, then we may define an *objective* as the instrumental or operational expression of that goal. Income maintenance is a specific objective which results from a variety of social goals. The transfer of income from one income class to another, or from one social group to another, arises not only because of considerations of equity or justice, but also because of considerations of system maintenance, that is, the desire to keep an alienated subgroup of the population within the pattern of relationships. It also derives from the norm of integration, that is, from the desire to decrease the percentage of people who are alienated in total society. Income maintenance therefore is an instrumental variable designed to take care of a variety of other broader social norms or goals.

Table 1 illustrates one possible structure of relationships underlying public policy making. *Efficiency, growth, stability, equity, freedom and security, integration,* and *system maintenance* are some of the most dominant norms that come readily to mind. Generally speaking, efficiency is associated with the operation of the market mechanism. Growth generally—but not always—emanates from the most efficient allocation of resources. In this sense, one might say that the market or exchange economy is concerned with efficiency, while the grants economy relates to growth, stability, equity, freedom and security, integration, and system maintenance.

The basic difference between the exchange economy and the grants economy is the nature of economic flows: Under exchange, Party A transfers an exchangeable to Party B, in return for which

TABLE 1. THE RELATIONSHIP BETWEEN NORMS OR GOALS, OBJECTIVES, AND PROGRAMS



[1] "General efficiency" denotes the extension of the economic logic of allocation to broader purposes of society than narrow or market efficiency.

Party A receives an exchangeable of equal market value. Under grants, A transfers an exchangeable to B, without receiving in return a corresponding economic exchangeable. This is not to deny the possibility that A may receive some type of satisfaction or a nonmarket benefit, such as prestige or status, but these are not generally classified as exchangeables.

Most economic relationships are of a mixed nature, including both exchange and grants elements. Furthermore, many public policy measures convey either an explicit grant or an implicit grant to *some* groups in society. An example is found in fiscal or monetary policy, where special exemptions convey unequal benefits to different income or social classes; or in the rezoning of land from agricultural to commercial uses, which provides an implicit grant to landowners and speculators.

The norms of efficiency and stability are familiar in public policy. Going on to equity as a norm for a public policy, we may mention antipoverty programs as a specific expression of a social equity norm. Freedom and security, in turn, are norms underlying the present operation of the social security program, while the desire to promote more harmonious relationships between various groups of the community is expressed through various community development and integration programs. Finally, compulsory arbitration programs, agricultural price support programs, or progams designed to reduce the level of alienation among the urban poor, might be cited as measures of system maintenance.

The label "income maintenance programs" has generally been associated with antipoverty and social security programs. Accordingly, they are primarily directed toward the goals of equity, freedom, and security. Integration or system maintenance might have been considered as incidental benefits.

When a broader view is taken of individuals in the total system, we must recognize that social security programs do have a system maintenance and integration effect. They protect the system from being saddled with large numbers of unemployed individuals or destitute families. Thus they act as a "social stabilizer," preventing the violent disruption of production and consumption that is usually associated with a revolution. This thought is also implicit in Kenneth Boulding's view of the role of income maintenance policy (in his book, *Principles of Economic Policy*):

> All modern nations accept the principle that there is some minimal level of real income below which its individuals or households cannot be allowed to fall. This led at quite an early date, to the development

of "poor laws" or public assistance programs. These provide a certain "floor" of subsistence which is in a sense a "right" of every individual. . . . In no country does there seem to have been strong pressure from the electorate for the specific plans that were put into operation. Political pressure and dissatisfaction of course there was, but it took the form of broad movements rather than specific pressures—the Social Democratic Movement in Germany, the Socialist Movement in England, the various radical movements in the United States—perhaps it is not unfair to interpret the social security program that developed as an essentially "conservative" program to forestall pressures for something more radical. From this point of view the programs have been highly successful; they have contributed a great deal towards "the deproletarianization"—integration of the mass of the people into the general economic fabric—and have greatly increased the degree of general acceptance of existing institutions. If we no longer live in a revolutionary era, social security must be given a good deal of the credit (or blame, if one is concerned about the soporific effects of security).

The need to include integration and system maintenance among the goals of income maintenance programs becomes evident when a basic rationale for social welfare is considered. The need for social action is apparent, particularly because individual preferences seem to be inadequate to provide, through private savings, for contingencies of retirement, unemployment, or accidents. This calls for political decisions which result in legislation requiring social security contributions in the form of a tax rather than in the form of voluntary contributions.

This interference with individual preferences would generally be considered as a decrease in individual welfare by the pure welfare economists. However, the limited planning horizon of the individual, as well as the interdependence between the well-being of a particular indivdiual and other individuals, make a case for social intervention.

Interdependencies are quite evident in the case of the family itself as well as the larger group. The principle of individual decision making that assumes an independence of individual preferences becomes somewhat tenuous when one individual's mistakes affect the well-being of his family, his community, or the nation at large. Furthermore, under the assumption of interdependence, there is no theoretical rationale for even requiring an individual to suffer the consequences of his own actions. Accordingly, the need for a variety of integration and system maintenance norms arises in connection with a variety of income maintenance programs.

TRADE-OFFS BETWEEN MARKET EFFICIENCY AND GENERAL EFFICIENCY

Social security programs have lost that analogy to insurance where

the contribution made by the individual covers the expected risk. They have become essentially tax-transfer or grants programs. This is evident from the size of the benefits which have only a very tenuous relationship with the cost incurred by the individual through the social security tax. Thus we see the dual nature of income maintenance programs. On the one hand, they provide for needs irrespective of the past exchange or work behavior of the individual. On the other hand, they provide for contingencies in the course of work behavior as well as for transfers along the life cycle of the individual.

We may note a clear distinction between the exchange analogy inherent in the insurance view and the grant or transfer analogy identified with the universal "demo-grant approach" to income maintenance. The former attempts to associate the specific techniques of implementation with the concept of exchange and private insurance. This entails the analysis of criteria which qualify an individual to receive certain benefits. The demo-grant approach, however, does not analyze the particular need aspect of the recipient. It treats social security as a right of membership in society at large. Therefore, it does not require a means test for eligibility and other types of procedures which generally humiliate the recipient.

Larger grants can be expected when social security, and other related measures, are viewed essentially as tax-transfer programs rather than as insurance programs. The grants approach might therefore be considered less efficient than the welfare approach. But social security programs based only on the welfare approach, while alleviating some aspects of poverty for the individual, may fail to achieve integration or system maintenance for a group of recipients at large. The humiliation involved in detailed probing to ascertain eligibility is likely to have bad psychological effects in a culture which emphasizes individual work and the Protestant Ethic. The choice between the demo-grant and the welfare approach therefore involves clearly a trade-off between market-efficiency and equity considerations, as well as between market-efficiency and integration and system maintenance aspects. From this it is evident that there is generally an inherent conflict in the norms or goals, and that complex trade-offs between the various goals is a general feature of public income maintenance policy.

The problem in arriving at the magnitude of income maintenance programs is rarely, however, a simple trade-off between different norms competing for a *fixed* budget. Generally speaking, a higher commitment to equity and other norms entails a more costly program than a commitment to market-efficiency norms alone. This does not prove, however, that one is more desirable than the other. In order to

evaluate the contribution of either approach to social welfare, total benefits must be contrasted with total costs. Some trade-off between these two norms must be made. How valuable is it in terms of the aspirations of the total society, that a certain degree of equity is obtained, as compared to a certain degree of market efficiency? Society may, in fact, have an overriding preference system that favors neither of the two. An analysis of the objectives of social security, therefore, must take note of this trade-off between conflicting values without which the social security system is not satisfactory on either score.

Those who value market efficiency as an overriding goal are bound to be dissatisfied with the present social welfare system simply because they see inherent inefficiencies in the system. Those, again, who are concerned with the need and suffering of the indigent and the unemployed would favor going far beyond the present level of social welfare allocations. It comes as little surprise, therefore, that the social security system as a whole does not gain any ardent advocates on either end of the value scale. However, experts in the field have little problem in recognizing that, given the dual or multiple nature of the underlying objectives, the present system may not be so bad after all.

Even though experts recognize the merits of the present system in achieving *some* goals of the American society, others would argue that the system does not go far enough in meeting equity and related general-efficiency goals. As long as millions remain in stark poverty, alienated and befuddled by the optimistic claims of the spokesmen of the high-mass-consumption society, if not angry with what they perceive to be their deprivation of civil and human *rights,* something must clearly be done to achieve social balance.

EFFECTS ON THE RECIPIENT OF WELFARE VERSUS GUARANTEED INCOME

The present system of social welfare—termed briefly the welfare system—is characterized by several features which account for its strength and its weakness. First, the system is geared more toward intertemporal or intergeneration redistribution than to a genuine effort to meet basic needs. Second, for those aspects of the program that are specifically geared to the downtrodden, a means test generally results in a sense of stigma and degradation on the part of the recipient. And third, the level of payments is generally not adequate to support anyone at a tolerable level of living without his having to work or obtain additional income.

No doubt these features have been built purposely into the welfare system and give it its particular character. We may distinguish

an alternative system which has not been implemented to any great degree yet, but which we shall identify with the term guaranteed income system proper. Such a system is, first, more directly concerned with a need per se without such stringent requirements for work behavior on the part of the recipient. Second, no means test is required and hence the humiliation involved in accepting a transfer under the guaranteed income scheme is very small if it exists at all. And third, the amount transferred will in some cases be adequate to maintain an individual at a basic level of subsistence without his having to work.

A shift from the welfare system to a guaranteed income system therefore entails not only a rearrangement in programs, but also a rearrangement in the values of society. This entails an attitude toward the needy which is not as intimately tied in with the attitude toward work and saving—the Protestant Ethic—and therefore involves fewer criteria for eligibility. Furthermore, if such an income maintenance scheme is generalized so that everyone receives a certain minimum income, the stigma is eliminated entirely.

If we assume that one individual's well-being is intimately tied in with another individual's well-being, the receipt of grants income gives rise to mixed feelings on the part of the recipient. On the one hand, his well-being increases because with this change in income he is able to buy more goods and therefore his consumption standard rises. On the other hand, the very necessity of having to accept it, via an intermediary, or having to accept it at all, entails psychic costs. In short, this type of mixed reaction can be divided into four components of reaction or utility, namely those associated with:

1. An increase in the recipient's income.
2. A reduction in the community's income.
3. Receipt of the grant via an intermediary social worker.
4. Other sentiments of the recipient in connection with the grant.

Each of these components can have a positive or negative effect on the recipient's well-being. Generally, the first component is positive, because his income goes up and therefore his command over goods and services supplied through the market increases. The second component, however, may be relatively small as the grantor-grantee relationship is depersonalized: Since the grant comes from the community at large, the grantee is not likely to know the person who gave up a part of his income through taxes in order to finance the income transfer. Therefore he is not likely to feel a sense of disutility from contemplating the income loss of the grantor as may be the case in a small community characterized by personalized relationships. Furthermore,

the social worker—who under the welfare system often has power to curtail, expand, or continue the grant—has a pronounced effect on the recipient's feelings. Interpersonal relations between the social worker and the recipient may contribute to positive feelings in case of favorable relations, or negative feelings if the grantee resents the "paternalistic attitude" of the social worker. Finally, the fourth component reflects the grantee's general attitude toward having to receive grants. In a culture emphasizing work, the fourth component is likely to reflect the recipient's sense of humiliation and stigma associated with the means test and related policing procedures. It is therefore generally negative.

Under the present welfare system the third and fourth components are generally negative, decreasing the positive effect of the income transfer in the mind of the recipient, and leading possibly to further alienation of the individual and disintegration of the social system.

Under a guaranteed income system, in contrast, the third component would become zero—as the receipt of income is automatic and without the interference of a social worker—while the fourth component is likely to be very small if it exists at all. *The aims of guaranteed income plans, therefore, are not only to eliminate poverty through more adequate income transfers but also to reduce, if not eliminate, the sense of humiliation associated with present welfare programs.*

Operationally, these guaranteed income proposals have been tied either to the present or alternative tax system—hence their designation as negative income tax (which means positive income transfer) schemes—or to a basic income allowance for which each member of the family is eligible. The former approach, it appears, derives an equity norm from the progressivity and the structure of implied grants (tax filer's exemptions and standard deductions) of the present tax system (for example, the Friedman negative income tax plan) or from a family's poverty line based on some concept of subsistence living (for example, the Lampman plan). Under the first plan, the taxpayer receives annual payments equal to some percentage (negative tax or positive transfer rate) of his unused exemptions and deductions. Under the second plan, a family in poverty would be entitled to transfers equal to some percentage of its "poverty income gap" (that is, the difference between its present income and the level of income required to move out of poverty).

The second approach—identified with the plans of Tobin and Rolph—also denotes a tax schedule which specifies the amount by which each dollar of grant income is reduced for each dollar of ex-

change income earned through work. (This approach is similar to a tax credit in lieu of personal income tax exemptions.)

All of these proposals derive transfer amounts by an impersonal formula and some equity rule for minimum income support, thus reducing the disutility aspects of having to receive grants via a personalized intermediary and with an associated stigma. The more recent proposals by the President's Commission on Income Maintenance, as well as President Nixon's Family Assistance Plan, are derived essentially from a similar set of norms. The Family Assistance Plan, however, combines explicitly an efficiency criterion with the national equity norms of the Plan, that is, the need to register for employment and to accept an offer of training and work if available. Thus, at least implicitly, it takes into account both market efficiency and general efficiency norms in proposing a variant of a guaranteed income scheme.

IN CONCLUSION

Present welfare programs as well as some of the guaranteed income proposals contain provisions which are the result of conflicting norms. This conflict in underlying norms is not a reflection of irrationality of public decision making but of the nature of a complex society: Market efficiency has to be tempered by general efficiency—stability, growth, system maintenance, integration, and so on—if social welfare is to be improved. This gives rise to complex trade-offs between norms. The trade-offs inherent in the proposals for a guaranteed income appear to reflect a greater weight for equity, integration, and system maintenance norms than is inherent in the welfare system. This shift will not only reduce the instance of poverty—for which the present welfare system is clearly inadequate—but it is also likely to decrease alienation and increase integration within the American society.

The current trade-off between market efficiency and general efficiency norms is not very popular with those who see themselves passed over by the welfare system in particular, and the whole public grants economy in general. If the public decision makers recognize their responsibility for the attainment of a variety of goals and objectives—as the current measures of income maintenance reform seem to suggest—the first steps will have been taken to solve the social problems of our day. If public policy, however, takes a narrower view of its obligations and goals, the social applecart may have to tumble even further, before the social and economic signals resulting from disequilibrating forces are read in unmistakable terms.

CRITERIA FOR INCOME MAINTENANCE PROGRAMS

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This discussion will be focused on one segment of our income maintenance programs, specifically those we call welfare programs. First, I will review some of the social and economic origins of those programs and describe their inadequacies. I will then specify some rules which may be useful in eliminating "the welfare mess," and briefly evaluate the President's proposed Family Assistance Program in terms of those rules. Finally, I will discuss changes that passage of this legislation may cause in other income maintenance legislation as well as the likely political effects of such changes.

Our story of welfare in the United States begins in the late eighteen hundreds with the passage of relief legislation by a number of states. Such legislation was typically concerned with emergency relief in periods of economic depression. Gradually, however, these programs became permanent. Their main concern was to assure that widows with children, and other persons who could be certified as "deserving," were provided aid in periods of economic distress.

The major welfare program of our time, Aid to Families with Dependent Children (AFDC), was itself a product of one of those periods of economic distress. Passed during the early period of the New Deal, it provided regular income assistance to mothers with children. When 15 million workers were unemployed, it was clear that mothers with small children would not be able to find work. They required assistance, and AFDC was the answer.

However, we were never very happy with the idea of relief, even during the worst of the depression. For most of us poverty carried an implication of laziness. It still does, and all our welfare legislation has embodied within it the desire to help those who cannot help themselves, and the fear that we will be "taken" in the attempt. The song, "Welfare Cadillac," is a popular reflection of the fear that the lazy and shiftless are taking advantage of that program.

It should not surprise us that the programs which grew out of these conflicting attitudes contain conflicts within their own program structure and also are in conflict with other income maintenance programs.

It is useful to describe the effects of such conflict. For instance:

1. Persons may be eligible for AFDC in one state, or a county within the state, and not be considered eligible in an adjoining state or even an adjoining county.
2. Even among program eligibles, benefit levels vary as much as 50 percent within states, and 500 percent between states.
3. The system subjects its beneficiaries to a level of continuing and personal observation and investigation which most of us would consider socially repugnant and personally intolerable.
4. The program serves only about one-third of all those who are poor. The lowest paying states have the largest number of poor persons and are themselves low per capita income areas. Thus, taxes now being collected and distributed through public assistance in these states represent much higher levels of sacrifice than do high payments in more affluent states.
5. The investigative system which we use to guard against overpayment and payment to ineligibles, as defined locally, is so inefficient that nearly one-fifth of total program expenditures are required to pay for administration and investigation.

These are not, however, the most disastrous effects of the system.

Those who receive benefits are generally subject to tax rates on earnings which are usually equivalent to 100 percent. Thus, the system provides no monetary incentive for anyone receiving benefits to work. It is difficult to imagine a more thoroughgoing mechanism to discourage work. Indeed, what is surprising is that many welfare recipients do work in spite of the perverse incentive structure of the existing system.

The system provides no rewards for the group which would generally be considered the most deserving of all—male family heads who work 40 hours a week, 50 weeks a year, but in spite of their work efforts remain poor. Practically this entire working poor population is specifically excluded from any protection by our welfare system.

This criticism of the existing welfare system could continue for several pages, but we have probably gone far enough to agree with both Presidents Johnson and Nixon that the present welfare system is a social, economic, and political failure.

BASIC RULES FOR AN INCOME MAINTENANCE SYSTEM

This enumeration of the faults of the existing system can help us

to specify some general propositions of what an income maintenance system should do. I have tried to profit from the program failures of the existing system in specifying five basic rules for designing an income maintenance system. They are:

1. Income inadequacy is a national problem, and given the will to seek solutions to that problem, the answers must be national in scope rather than state or local.
2. Whatever system is chosen as the "solution," it should provide clear and consistent incentives for work and self-improvement.
3. The chosen design should guarantee administrative efficiency.
4. Acceptance of benefits should not be conditioned on the acceptance of a degraded status within the community.
5. The system should conform to the rule of law. Eligibility, benefit levels, rights, and obligations must all be specific and objective—not dependent upon the attitude or authority of bureaucrats. This is really very simple and very important. Society can perhaps best be judged by whether it provides socially defined equity in an impersonal and uniform manner. When we begin to deviate from such norms, the citizen loses faith in his government. When deviation is widespread, every man becomes a "hustler" and every other man his game.

This is all that an income maintenance system should try to do. It cannot prevent what may be regarded as immoral behavior and it should not try to. We cannot use an income maintenance program to inflict punishment for illegitimacy. That problem—if it is a problem —must be solved by other methods. Penalizing the child for the "sins" of the mother will not reduce the number of illegitimate children or feed those who already exist.

Neither can an income maintenance system substitute for adequate job opportunities. Providing incentives to work will be useless unless work is available.

We must not put a penalty on internal migration by declaring persons ineligible for welfare who have not lived within local jurisdictions a specified period. A person who moves to New York from Mississippi does so because he believes that work opportunities, or schools, or welfare is "better" there. That is a right guaranteed by the Constitution, and it is a right which forms the bedrock of the theory of free enterprise. A law or an institution which is acceptable only so long as no one seeks its protection is a poor law.

We have listed five rules as the basis of program design for in-

come maintenance legislation. These rules have specific implications with regard to decisions determining the source of program funding and its administration.

If, for instance, we agree that income inadequacy is a national problem, then the burden of that problem should be national in scope. This conclusion argues strongly that program funding should be national rather than state or local. The burdens and benefits of such a program are bound to be unequal, but the only way of insuring that they are not disproportionally unequal is to fund such programs on the federal level—preferably from general revenue sources.

The same rationale applies (although with less force) to the question of benefit levels. Income support for a given level of income inadequacy should be the same in Alabama, or Colorado, or New York.

Differences in the "cost of living," which argue for payment differentials, are not so wide as is normally assumed. Furthermore, no agency professes competence to suggest what those differences might in actuality be. Finally, the payment of a high benefit in high cost areas provides strong incentives for people to move there. The result if such movement is to further clog our metropolitan areas with those least equipped to deal with urban life.

The application of the rule that our program should be national, combined with acceptance of the rule of impersonal and uniform application—the rule of law—calls for uniform rules and regulations of program eligibility throughout the states.

Insistence on this point probably requires that the program be administered at the state or federal level. (I take it as given that such a program should be administered under a strong civil service program, so that political pressure cannot pervert the system to reward the politically deserving.) Given the acceptance of these programs specifics, I am not all that concerned whether the administrative officials are state or federal employees. My personal preference would probably be for federal administration. Individual experience with federal officialdom may not have been altogether a happy one, but state bureaucracies seem even less responsive to the average citizen.

So much for the theory of what would be done if we, who are logical, rational men and women were in power instead of the politicians. The facts of the matter are of course that the politicians are not so irrational as they might appear to be, nor even so irrational as it is comforting to believe when they turn down or, worse, will not even hear out one of our pet proposals. The politician must make reasonably certain not just that he will get re-elected, but if he is a

responsible man, that proposals which he supports will make things somewhat better and not worse. That rule alone would consign at least half of all academically conceived plans to the trash bin.

Given that modest requirement—not to reach perfection, but merely to achieve sufficient reform to redirect the program with reasonable assurance that the system will be better, that it will begin to move toward our five enumerated goals—where do we go from here?

THE FAMILY ASSISTANCE PROGRAM

The proposed Family Assistance Program, which has been passed by the House of Representatives and is now being considered by the Senate Finance Committee, is, I think, where we should go.

This does not mean that it is without fault. It does not sufficiently reward work effort. It does retain a mix of local, state, and federal programs. It does mix other goals—child care and work compulsion —with the income assistance goal. It does have these and other faults. Even so, it is clearly a revolutionary program. It is perhaps the most revolutionary program since the establishment of the federal income tax amendment. It promises to be at least as far reaching in effect as the Social Security Act.

The bill of course could be, and may be, improved before it becomes law. In particular, it might be desirable to specify a phasing out of the food stamp portion of the proposal in three to five years. The work test might be made more specific and thus less subject to the peculiarities of local officialdom and local prejudice. Raising the basic benefit for a family of four from $1,600 to $2,000 a year would relieve much of the pressure on local and state authorities to maintain an inefficient and regressive supplementary system.

There are other provisions in the bill which also should be changed, but are less likely to receive much attention. The child care provisions represent essentially romantic rather than technical answers to the problem of the working mother. The exemption of the first $60 per month of earnings provides special work incentives most likely to be felt among families with a secondary family worker, not among families with a single worker who is already on a job.

How does the bill stack up against our five rules?

1. A national rather than state or local system. The bill compromises this rule. It abolishes the traditional "matching formulas" under AFDC and puts in its place a national system with uniform payments with uniform rules. It excludes, however, families without children and continues partial support of state and local supplementary welfare systems.

2. Clear and consistent incentives for work and self-improvement. The bill again compromises the rule. Although consistent incentives are provided in the bill, persons now receiving state assistance and receiving food stamps as well retain very little in the way of "clear" incentives, since an increase in income will reduce their welfare by 82 percent of the increase.

3. Administrative efficiency. The Family Assistance Program comes close to our rule in this area. Eligibility will be determined on the basis of client application which will be validated by spot checking similar to that of the Internal Revenue Service. An element of compromise is, however, introduced by continuing program operations of the Department of Health, Education, and Welfare rather than transferring them to the Internal Revenue Service, which would be more efficient.

4. Benefits established without degradation. The law as written specifies benefits under the Family Assistance Program as a matter of right, not at the pleasure of bureaucratic determination of "deserving."

5. Uniformity—the rule of the law. The bill is rigid in its requirement that benefits and obligations be the same throughout the country.

The bill is, therefore, not all we might hope for, but in terms of the general quality of such legislation, it is much better than we might expect. It represents a strong and important movement toward the rationalization of national income maintenance legislation. That redirection, in my view, outweighs the bill's defects.

The argument has up to this point been concerned almost exclusively with the AFDC program and its proposed replacement, the Family Assistance Program. We have not discussed the retirement program under the Social Security Act, nor have we analyzed income maintenance in terms of Unemployment Insurance, or Veterans Disability Pension programs. These programs are most certainly part of the income maintenance program structure in the United States and affect and will be affected by the Family Assistance Program. However, no pressing public policy decision is pending with regard to these programs. This does not mean that they will continue as discrete and independent programs. In fact, I am certain that the "solution" of the problem of income inadequacy by the Family Assistance Program will force a re-examination and restructuring of these complementary income maintenance programs.

I would even be willing to suggest that the Family Assistance

Program will be broadened in coverage and that benefit levels will be increased to the point that minimum wage legislation may become a dead letter.

Finally, I would point out that many serious analysts and policy makers are very unhappy with the general agricultural support programs, particularly the cotton and wheat programs. These policy makers are beginning to ask why the income assistance elements of such programs cannot be served by a general income maintenance program like the Family Assistance Program. This suggests the cotton and wheat programs may not be "long for the world."

Earlier in this article I have called the Family Assistance Program a revolutionary program. That description does not, however, appear to be justified by the bill itself. It does substantially broaden the population eligible for work related income assistance and will as a consequence of that action, increase the number of beneficiaries from 4.5 million to about 20 million, and that is a very considerable accomplishment. It does provide a more adequate work incentive structure than existing law, and that is also important. The revolutionary nature of the program, however, is determined by the forces which its enactment will undoubtedly set into motion.

The Senate Finance Committee pointed out that the bill as written did not provide clear work incentives for persons who received food stamp benefits, were public housing beneficiaries, or were protected by Medicaid.

The administration responded to this criticism by eliminating the existing schedule of benefits under the food stamp and public housing programs and replacing them with schedules which meshed with the Family Assistance Program itself, and in addition specified that the food stamp program be transferred from the Department of Agriculture to the Department of Health, Education, and Welfare. This latter step will permit the food stamp program to be administered in concert with the Family Assistance Program. Applicants will be able to indicate the desired level of food stamps at the same time they file for Family Assistance Program benefits.

More important than either of these steps was the administration proposal to replace the Medicaid program with a comprehensive medical care program for Family Assistance Program beneficiaries plus many millions of other families not eligible for the Family Assistance Program. The administration has promised to submit the detailed legislation package for this program by February 15, 1971. The preliminary statement regarding the medical care program has not

neglected the problem of incentives. Coverage will be provided for some 30 million Americans.

I have already suggested that enactment of the Family Assistance Program may lead to a total restructuring of the Social Security retirement program and various agricultural support programs, but even these changes might not justify use of the word "revolutionary" to describe the effects of the proposed program. I am confident that income protection under the Family Assistance Program will be enlarged, probably within two or three years, to provide income protection for all persons under 65, whether or not they live in families with children. The history of the Social Security Act provides an analogous example of program expansion. I would not be at all surprised if the basic benefit also rises rapidly. It is not too much to hope that basic benefit levels may equal the poverty line before the end of the decade.

The economic effects of a program like the Family Assistance Program are reasonably certain. Most of the money will go to the South—because that is where most of the poor live. This will, of course, enormously strengthen consumer markets. The sales of shoes and food and paint and, yes, television sets will increase. This is why I think the National Association of Manufacturers supports the program. It will also increase the cost of domestic labor. This, I think, is the heart of the reason why the chambers of commerce in the South have opposed the program. I suspect that the majority of the people will vote for higher consumption and higher sales even in the face of higher wages.

Rising wages and spendable income, which will rise even in the absence of higher wages, will undoubtedly affect the course of political life as well. A population dependent on others for the necessities of life is politically dependent. The Family Assistance Program will seriously erode the foundations of such dependence. Political changes of startling dimensions may follow.

This paper has perhaps given insufficient attention to the force of the "Protestant Ethic" in determining the character and substance of our income maintenance legislation. There is, after all, a strong belief (and this belief is strongly reinforced by general prosperity) that anyone can "make it" in America if he works hard. This belief is at the heart of our fears that malingering and laziness are the root problem of many welfare recipients.

I do not doubt the emotional force of the argument. There are undoubtedly thousands who cheat the welfare authorities. There may even by a few "welfare Cadillacs," even as there are bank presidents

who cheat depositors by juggling books, and millionaires who cheat us all by not paying their income tax.

It is, I think, more important to provide a rational and adequate system for families headed by a male working a full year, full time, who are poor in spite of it all. A society that worries about the 2 or 3 percent of welfare recipients who get benefits though technically ineligible, while disregarding the needs of the working poor, has misplaced its concern. A defense of such inequitable treatment on the grounds that general income assistance will ruin the nation's "moral fiber" seriously misunderstands the nature of morality and the work ethic.

TYPES OF INCOME MAINTENANCE PROGRAMS

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THE CORE ISSUE: INCOME DISTRIBUTION

Whatever the current array of alternatives, each one seeks to affect the core issue—the relative distribution of income. The 1969 poverty threshold for a four-person family was $3,720, and 24 million persons lived on incomes below their poverty threshold.

What pattern of income distribution should exist is, of course, as subjective a matter as determining the poverty threshold. But as we come to understand that poverty is normally imposed upon people by forces beyond their control, we seek ways to provide a minimum income. Consequently, current welfare alternatives focus on income maintenance as we seek to mold an acceptable policy to serve as successor to existing welfare policy—a term that refers especially to Old Age Assistance, Aid to the Blind, Aid to the Totally and Permanently Disabled, and Aid to Families with Dependent Children.

VALUES CONFLICT

An income maintenance proposal must be compatible with the values we hold concerning work, equality of access to opportunity, and social responsibility. These values serve a critical role in examination of income maintenance alternatives.

The most widely known dictum concerning our values toward work is: "He who does not work should not eat." The earning of money is an obligation that the individual is supposed to feel.

A basic assumption undergirds these statements, namely, that people have access to the opportunity to work. The Commission on Income Maintenance Programs has concluded that this assumption no longer holds. Few who observe the need for jobs and lack of access to jobs in rural or urban America would dispute this conclusion.

The concept of equality of access to opportunity extends beyond that expressed as the right to equal opportunity. In essence, equality of access to opportunity recognizes that individuals born with equal ability do not have equal access to means for developing that ability or marketing their ability after it is developed.

Any consideration of equality of access to opportunity results in many questions. Did the access to opportunity obtained by that per-

son result from a land oriented price-income policy established a generation ago? Did access to an opportunity to work terminate for that person as a result of an activity conducted by some mechanical or chemical engineer ten years ago? Was access to proper nutrition, education, or health denied for that person by accident of place of birth? Was equality of access to opportunity denied because he or she was a member of a large family or a poor family or both?

Social responsibility extends beyond income redistribution and job provision and beyond the concept that we are our brother's keeper to the concept of man's humanity to man. This becomes quite clear if we consider the argument that the poor want (1) personal respect as people, (2) social justice, (3) a political voice, and (4) economic opportunity.

Though brief, this sketch illustrates the values that mold income maintenance alternatives. The value we hold about work dominates the molding process. But the process itself is bound together by the ethic of self-integrity. It has been said that this ethic relates to the status deserts of dissenters. Its central judgment is that in case of conflict, both the individual and his group (or groups) are responsible for seeking a new mode of thought and practice that will unify the hitherto conflicting views of each. Surely this is a necessary viewpoint in the task at hand.

INCOME MAINTENANCE

All income maintenance programs seek to achieve income averaging, and they divide into two major classes. Programs designed to average one family's income for a number of years over the life-span of that family are assigned to the individual equity class. Programs averaging one year's income of a society among families by means of cash or in-kind transfers, which provide income supplements to some families by taxing others, are placed in the social equity class. This paper considers only social equity or income supplement programs. The basic policy questions surrounding income supplements are: To whom? From whom? In what form? At what cost?

Cash Transfers

Cash transfer programs consist of money transfers not subject to use restraints. Transfers in this form enable rational, informed individuals seeking to maximize satisfaction per dollar of income to reach the highest level of individual satisfaction. Despite this economic argument, relatively few programs designed to assist the poor or eliminate poverty provide for cash transfers; they provide for service or in-kind transfers.

Cash transfer programs apply on either a universal or a categorical basis. Universal programs apply to all persons meeting a single criterion such as being over age 65 or being among that set of persons defined as poor. A program becomes categorical when more than one criterion delimits the set of persons eligible to receive benefits. For example, some poor people may be denied benefits because they are not members of a family with at least one child.

Proposals are being made to reform an existing cash transfer program, AFDC (the Aid to Families with Dependent Children Program), by using relatively few criteria to delimit who is eligible for benefits. Normally an AFDC applicant is a female head of household. To prove eligibility:

1. She must demonstrate that the child is deprived of the care and support of one parent by death, desertion, incapacity, or (in 21 states) unemployment.
2. If the cause is desertion, she must agree to report the child's father to the district attorney, and usually, swear out a warrant for nonsupport.
3. In most states she must prove that she has been a resident for one year.
4. She must show that she has no real property, or that it is valued within the prescribed limits.
5. She must show that her income is insufficient for self-support—that there is a budget deficiency.
6. She must meet whatever special requirements the state may impose.
7. She must give a "social study" describing her background and history and make a plan for herself and her child to lead toward self-support.
8. She must submit to house visits by social workers.
9. She must be prepared to have all statements referring to eligibility verified.

Before the Supreme Court voided the "man-in-the-house" rule, males "earned" AFDC eligibility for their family by deserting or not marrying the mother of their children. AFDC shows that increases in the number and the severity of criteria that delimit the set of persons eligible for a program do not necessarily decrease the number of eligible persons. People learn and adjust; social attitudes change; and economic conditions change. Over a twenty-year period ending in

79

December 1969, these phenomena combined to produce a 340 percent rise in the total of AFDC recipients. AFDC families increased from 651,000 to 1,875,000. Total AFDC recipients (children) increased from 1,661,000 to 5,413,000.

Whatever commended AFDC cash transfers initially, changes over time caused several problems with the program. Work was discouraged among AFDC recipients by disincentives that reduced the transfer payment one dollar for each dollar earned. Families in identical or nearly identical circumstances in different geographic areas received different treatment. Arbitrary authority allowed local officials has often been used to force recipients either to conform to certain patterns of behavior or lose benefits. Vexed communities have rankled at violations of their tenets. Moreover, the ethnic composition of AFDC recipient families irritated nonrecipient families in many communities. These issues focused additional attention on the need to bring about welfare reform.

The clamor for social equity reached such levels that policy makers turned their attention to welfare reform. From their effort came not only proposals related to welfare reform, but also proposals for poverty elimination and income maintenance. Friedman's idea of welfare reform based on the federal income tax system did not prove viable, but his idea for removing some disincentives to work by reducing payments by 50 percent of increases in earned income rather than 100 percent for each dollar earned proved viable. Lampman and others offered proposals that extended the analysis of the problem, but did not effectively solve a central dilemma: how to move the recipient from cash transfer programs to self-support in a manner that produces the minimum disincentive to work. Tobin made an important contribution to the solution by his proposal to use a minimum payment. Above this, the transfer payment would be reduced by 50 percent of any increase in earnings. This meant a recipient would have both an incentive to work and increased income. Then, as capability of self-support improved, program costs would decrease.

In-Kind Transfers

Family assistance is a cash transfer program, but food stamps (an in-kind transfer) are combined with the program in a way to make them accessible to any eligible family. In addition, some prospective recipients are now eligible for such in-kind transfers as public housing and Medicaid. As their income rises, recipients of in-kind transfers normally pay an increasing portion of the value of the commodity or services involved. Because payment rates do not vary uniformly with income increases, "notch" problems occur, causing cumu-

lative marginal tax rates to vary widely, often approaching 100 percent, and in some instances to exceed several hundred percent. In these cases, the disincentive to earn income at certain levels is obvious. The revised Family Assistance Act of 1970 gives attention to ways to reduce these disincentives. (See appendix tables, pp. 84-85.)

A basic assumption underlying in-kind transfers is that policy makers can develop that combination of resources which maximizes satisfaction of the recipient. Yet, what may maximize satisfaction for the individual may conflict with the objective sought by the community. Public housing produces new buildings for community members to look at; but the housing does not necessarily maximize satisfaction for those individuals who live in it. Combining food stamps with family assistance provides a similar case. At present, a community objective is to reduce, perhaps eliminate, hunger and malnutrition. It has been argued that food programs complete with an educational effort would be more efficient than income supplements alone in closing the food and nutrition gap.

Food stamps lacked a critical condition when family assistance was proposed; equality of access to obtain food stamps did not exist. The revised version of the Family Assistance Act of 1970 makes access universal and equal. It would permit a recipient family to indicate by a simple check mark that it desires food stamps, and the charge will be automatically deducted from the transfer payment and the stamps mailed to the recipient with the payments. This arrangement should effectively close the hunger and nutrition gap for families with children.

Cost controls apply to in-kind transfer programs just as to cash transfer programs. AFDC costs (and those for similar programs) have been paid directly from the federal treasury. Because federal monies supplement payment levels set by state and local governments, especially cities, AFDC rolls could expand and federal payment levels could rise without limit so long as at least 50 percent of costs came from another level of government. This practice would end if the family assistance program were adopted.

THE FAMILY ASSISTANCE PLAN

Under the Family Assistance Plan only families with children would be eligible for payments. A four-person family with no other income would be eligible for a $1,600 minimum payment, based on $500 for the first two family members and $300 for each additional member. This eliminates income discrimination by sex, since one family member may be an employed male head of household, and

adjusts to a limited extent for economies of scale in family size. Family resources cannot exceed $1,500, except for a home, household goods, and property essential to self-support, a provision that extends eligibility to many working poor, including farmers. Because the minimum payment is uniform nationwide and the cost of living varies, family assistance favors residents of rural areas compared to urban areas and residents of southern states compared to nonsouthern states.

Economic incentives to work appear in family assistance in several forms. First, the basic transfer payment would be reduced by only 50 percent of any increase in earned income up to $3,200. In addition, all income will be determined net of federal income tax. Another incentive excludes earnings up to $60 per month as a cost of working allowance. These incentives combine to produce a net money breakeven income of $3,920. Income payments will be determined each quarter. When payments lag with respect to changes in income, farmers should benefit because their incomes tend to vary.

A legal incentive to work is contained in the proposal. The first two members of a family unit must register for work or training except where one has not reached sixteen years of age, or is the mother of a child not six years of age, or is incapacitated by illness or age. The question of suitable work continues as an issue, but as revised by the administration the recipient's right of refusal of employment on grounds of prior experience and skills would apply only to cases where similar employment is actually available in the community and the individual has not been given adequate opportunity to obtain it.

How a cash transfer program may affect the work incentive remains a major concern. Based upon initial research data, the University of Wisconsin Institute for Research on Poverty states that the crucial issue relating to the effect on earnings is unresolved in the sense that no significant changes have been found. But to the extent that differences appear between control and experimental families they are generally in favor of *greater* work effort for experimentals. Hence, anyone who seeks to support an argument of drastic disincentive effects cannot expect to find even weak support in the data so far. It further states that no evidence has been found in the urban experiment to support the belief that negative-tax-type income maintenance programs will produce large disincentives and subsequent reduction in earnings. Unfortunately, this experiment does not study response to changes in cumulative marginal tax rates when cash transfers and in-kind transfers combine.

Family assistance also contains a mechanism to control cost at the federal level. Federal funds would be available to supplement 30

percent of any state payment level between the federal minimum and the poverty threshold. This is a simple mechanism. Only Congress can change the minimum payment levels. States maintaining cash transfer programs that exceed the poverty level cannot obtain federal funds to supplement that amount in excess of the poverty level. Poverty levels under the revised proposal would be:

Family Size	Basic Amount
One	$1,920
Two	2,520
Three	3,120
Four	3,720
Five	4,270
Six	4,820
Seven	5,320
Eight	5,820
Nine	6,270
Ten	6,720
Eleven or more	7,170

Incremental increases in income supplements will not be available to families beyond eleven members, even though earnings of such families do not bring them to the poverty threshold. Poverty levels must be revised annually by the Department of Health, Education, and Welfare.

By using this form of cost control and by paying the total costs of the minimum program from the federal level income maintenance proponents seek to achieve two objectives: (1) raising minimum payments until at least all children have available poverty threshold incomes and (2) shifting income maintenance costs completely to the federal level. In addition, the program offers states an option strengthened by an economic incentive to have family assistance administered at the federal level.

An estimated 13 million people living in 3.7 million family units are eligible for family assistance, according to recent estimates based on adjusted data from the Current Population Survey for 1969. About 43 percent of these families live in the South. One-half of all eligible households would be headed by a male. Among all heads of household 61 percent would be white and 39 percent nonwhite (Table 1). By comparison about 50 percent of current AFDC recipients are nonwhite, and about 70 percent of the working poor are white.

When day care and training costs are included, plus the increased cost of food stamps due to the check off feature, net costs of family assistance are placed at $4.1 billion. Total federal income maintenance

TABLE 1. ESTIMATED NUMBER OF FAMILIES ELIGIBLE FOR FAMILY ASSISTANCE BENEFITS IN 1971, BY SELECTED CHARACTERISTICS

Characteristic	Number of Families (in Thousands)	Percent of Total
Grand total	3,678	100.0
Sex of family head		
Male	1,846	50.2
Female	1,831	49.8
Race of family head		
White	2,258	61.4
Nonwhite	1,420	38.6
Age of family head		
65 and over	132	3.6
Under 65	3,546	96.4
Region of residence		
Northeast	776	21.1
North central	747	20.3
South	1,570	42.7
West	585	15.9
Work experience of family head		
Work full time all year	1,167	31.7
Some work experience during year	1,297	35.3
No work during year	1,182	32.1
Military	32	0.9
Number of earners in family		
No earners	883	24.0
One earner	1,589	43.2
Two earners	768	20.9
Three or more earners	437	11.9

NOTE: Based on the March 1969 current population survey which collected information on family status at the time of the interview and on income for the preceding year (1968). The survey data have been adjusted to account for changes in income and population expected to occur from the survey year to 1971.

SOURCE: U.S. Congress, Senate Committee on Finance, H.R. 16311, The Family Assistance Act of 1970, 91st Congress, 2d Session, June 1970, Committee Print, p. 25.

payments are an estimated $7.8 billion. These estimates are for 1971 and are based on the foregoing eligibility estimates. The total cost divides into $5.0 billion for low-income households, including family assistance, and $2.8 billion for the adult category, which would be a single program combining Old Age Assistance, Aid to the Blind, and Aid to the Permanently and Totally Disabled.

Family assistance directs money specifically to families with children, according to family size and family income. This is a move

toward a minimum income support floor for society. Because it is a categorical program limited to children with families, family assistance offers an effective replacement for a series of program alternatives called children's allowances, which are used in many other countries where different economic conditions exist. Children's allowances are a costly and inefficient means of correcting income distribution problems.

Critics fault family assistance for excluding unrelated individuals and married couples without children and for not being a universal program. It may also be criticized for the low level of proposed expenditures on day care and training programs. Both programs will be extremely difficult to deliver for rural areas. The consequence could seriously strain the meaningful application of the work registry provision and possibly destroy it, in time, without considerable adjustment.

For each 1 percent rise from a 3.8 percent rate of unemployment, an estimated 100,000 families would become eligible for family assistance at a cost of $100 million. The effect will prove moderately countercyclical, while affording families some protection against economic forces beyond their control. Whatever effect changes in employment rates may have on family assistance, the developing core issue is access to job opportunity, and if family assistance becomes effective, this issue will gather momentum.

GUARANTEED EMPLOYMENT

Solving the developing issue of jobs will prove slow and painful, and much discussion and analysis will be required before effective solutions develop.

Removing emotion from discussion of guaranteed employment may prove difficult, because this income maintenance alternative creates a "make work" image. This changes, however, when it is recognized that guaranteed employment produces (1) useful goods and services, (2) skills which may be transferred to the private sector, and (3) psychological benefits to both the worker and the society.

Minimum income payment schemes have been criticized for lack of attention to job creation, a failure which can be fatal to the avowed objective of fighting poverty. Though family assistance does not purport to eliminate poverty, the design to do so by raising payments is present.

To correct for the lack of job opportunities, it has been suggested that seventy existing uncoordinated federal job programs be combined under a single agency. Employers would be required to register jobs available, but not to hire those persons seeking job opportunities

through the agency. The agency would use on-the-job training with industry and government as well as conduct its own program to develop skills among the unskilled.

One goal of this proposal is to lower unemployment rates to 2 percent. An estimated $50 billion would be added annually to gross national product by fully employing the labor force, for an estimated net cost to taxpayers of some $5 billion. A refundable tax program is included with this scheme, which needs a means of controlling inflation.

Guaranteed employment programs normally provide for wage subsidies, the amount paid in excess of the worker's economic productivity. The wage subsidy can be used to achieve other objectives. For example, this form of subsidy may delay substitution of capital for labor and keep some persons who cannot be easily retrained working at jobs. Changes in the minimum wage affect the employment of such persons, and wage subsidies could usefully apply. Wage subsidies tend to favor employers for a number of reasons. Thus, these are not simple problems and may well be examined in greater depth at another time.

SERVICE PROGRAMS

A cash transfer program such as family assistance will have highly visible costs. As a result, policy efforts will seek to lower these costs to a minimum, a sound policy objective in any situation. Basic health, education, and employment programs will have high priority.

Delivery of many current programs is highly ineffective. Few rural people are aware that a single family could effectively benefit from locally based service programs funded from more than half of 210 formula grant programs and nearly all of the 50 formula grant programs supported by the Department of Health, Education, and Welfare. The Commission on Income Maintenance Programs has said the reason for this lack of awareness is that the major burdens of the task of integrating these programs at the local level have fallen upon local officials with little familiarity with the federal administrative structures and policies.

Many people agree that the federal government will have a self-imposed incentive to improve program and service delivery as a means of lowering family assistance program costs. The bill passed by the House of Representatives did not overlook this point, and it authorizes federal assistance for states which establish a comprehensive program to coordinate delivery of service programs. An educational agency associated with the land-grant system may find that it can contribute effectively to lowering costs of an income maintenance program using cash transfers.

APPENDIX TABLE A. CURRENT LAW: BENEFIT POTENTIALLY AVAILABLE TO FOUR-PERSON FEMALE-HEADED RECIPIENT FAMILIES IN CHICAGO, ILLINOIS[1]

(a)[2] Earnings	(b) AFDC	(c) Total Money Income	(d) Taxes: Federal, State, and Social Security	(e) Net Money Income	(f) Food Bonus	(g) Average Medicaid Benefit	(h) Total of Money and In-Kind	(i) Public Housing Bonus	(j) Total Net Money and In-Kind
$ 0	$2,976	$2,976	$ ...	$2,976	$480	$395	$3,851	$840	$4,691
720	2,976	3,696	35	3,661	360	395	4,416	840	5,256
1,000	2,976	3,976	48	3,928	312	395	4,635	840	5,475
2,000	2,590	4,590	96	4,494	288	395	5,177	840	6,017
3,000	1,923	4,923	144	4,779	288	395	5,462	840	6,302
4,000	1,256	5,256	332	4,924	288	395	5,607	840	6,446
5,000	589	5,589	567	5,022	288	395	5,705	840	6,545
6,000	...	6,000	837	5,163	...	...	5,163	960[3]	6,123
7,000	...	7,000	1,047	5,926	...	...	5,926	720[4]	6,646
8,000	...	8,000	1,319	6,682	...	...	6,682	720[4]	7,402
9,000	...	9,000	1,527	7,473	...	...	7,473	...	7,473

[1]Only 18 percent of all AFDC recipients in Chicago live in public housing.

[2]Column letter headings are used to identify related notes, as applicable:

(b) State supplement based on maximum payment of $2,976 (adjusted for rent paid to public housing). Work related expenses based on estimated state averages of $708.

(c) Federal tax based on current schedule, including surcharge. State tax based on current schedule. Social Security tax based on 4.8 percent of earnings up to $7,000.

(f) Food stamp bonus based on local eligibility schedules.

(g) Medicaid benefit shown is the federal portion of the average benefit for all AFDC families in state. Payments vary by family depending on needs. State eligibility standards apply.

(i) Public housing bonus was calculated on the basis of the value of private market rentals less $90, the maximum rent allotment for AFDC recipients.

[3]Bonus increases above AFDC break-even level as families move from welfare to nonwelfare rent schedules.

[4]Above continued occupancy limit, but families would be allowed to stay, at higher rent, until other housing is located.

SOURCE: U.S. Congress, Senate Committee on Finance, H.R. 16311, The Family Assistance Act of 1970, 91st Congress, 2d Session, June 1970, Committee Print, p. 57.

APPENDIX TABLE B. PROPOSED FAMILY ASSISTANCE REVISED: BENEFITS POTENTIALLY AVAILABLE TO FOUR-PERSON FEMALE-HEADED RECIPIENT FAMILIES IN CHICAGO, ILLINOIS[1]

(a)[2] Earnings	(b) Family Assistance Payment	(c) State Supplement	(d) Gross Money Income	(e) Taxes: Federal, State, and Social Security	(f) Food Stamp Bonus	(g) Medical Insurance Bonus	(h) Total Net Money and Bonus	(i) Housing Bonus Proposed	(j) Total Net Money and In-Kind
$ 0	$1,600	$1,556	$3,156	$ ...	$345	$414	$3,915	$1,349	$5,264
720	1,600	1,556	3,876	37	116	342	4,297	1,201	5,498
1,000	1,460	1,509	3,969	52	86	333	4,336	1,178	5,514
2,000	960	1,342	4,302	104	...	300	4,498	1,095	5,593
3,000	460	1,175	4,635	156	...	246	4,725	1,011	5,736
4,000	...	987	4,987	236	...	158	4,909	923	5,832
5,000	...	416	5,416	443	...	51	5,024	816	5,840
6,000	...	...	6,000	669	...	...	5,331	670	6,001
7,000	...	...	7,000	912	...	...	6,088	420	6,508
8,000	...	...	8,000	1,134	...	...	6,866	170	7,036
9,000	...	...	9,000	1,369	...	...	7,631	...	7,631

[1]Public housing will be available to only 6 percent of family assistance families nationwide.

[2]Column letter headings are used to identify related notes, as applicable:

(a) Family assistance benefits are $1,600 for a family of four with no other income, based on $500 each for the first two persons, $300 each for succeeding persons. Family assistance benefits are reduced 50 percent for earnings, after the initial disregard of $720 for work-related expenses and a single deduction for federal income taxes.

(b) State supplementary payments are based on current payment levels with a 67 percent reduction rate for earnings, after the initial disregard of $720 and a single deduction for federal income taxes.

(e) Federal income tax computed on the schedule effective in 1972, assuming no surcharge. State tax is computed on current state schedule. Social Security taxes reflect the increase from 4.8 to 5.2 percent of earnings up to $9,000, which will be effective January 1971.

(f) Food assistance is based on present estimates that the food stamp program will replace the surplus commodity program in most areas within the first year of operation of family assistance. Food stamp bonus is the difference between the coupon allotment ($1,272) and the purchase price (31.8 percent of gross income less $240).

(g) The assumption here is that the family health insurance program would replace the present Medicaid program for families with a health insurance policy having a $500 premium value. This policy value includes no supplementation which the states might wish to make. Medical insurance bonus is the difference between contributions and the illustrative premium value of $500. The following illustrative contribution schedule is assumed: 0 percent of gross income to $1,600, 5 percent of that amount of gross income between $1,600 and $3,000, 10 percent from $3,000 to $4,500, and 25 percent from $4,500 to $5,620. Full participation is assumed.

(i) The housing bonus is calculated on the basis of the proposed 1970 Housing Act (S. 3639). That act sets a uniform system of rents for all subsidized rental housing, public and private, based upon fixed percentage of family income after $300 is deducted from gross income for each child in excess of two. On the first $3,500, families must pay 20 percent of net income for rent; on the amount over $3,500, 25 percent. The bonus is the difference between prevailing private rents for housing of modest standards, . . . based on the most recent determination. It was assumed that the required unit sizes were two-bedroom units for four person families.

SOURCE: U.S. Congress, Senate Committee on Finance, H.R. 16311, The Family Assistance Act of 1970, 91st Congress, 2d Session, June 1970, Committee Print, p. 57.

RURAL IMPACTS OF INCOME MAINTENANCE PROGRAMS

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Welfare has been the subject of intense debate throughout recorded history. The present concept probably originated in the concept of the human responsibility of individuals to the destitute. By tradition this assistance role has been played by families, churches, and fraternal orders. As industrialization and specialization have increased, welfare assistance has become institutionalized, and the responsibility for it has been assumed more and more by government. Since the passage of the Social Security Act in 1935, categorical aid—to the blind, disabled, aged, and female heads of families with dependent children—has been widely accepted as a necessary and proper function of government.

Recent debate has focused primarily on principles or moral values involved in welfare assistance, the size and character of the target population, and more effective strategies for reducing poverty.

The philosophy of most welfare programs is that employable people earn their income in the labor force, and that unemployment insurance and Social Security should provide protection against swings in employment and individual misfortune, including retirement and old age. Workers pay premiums to operate the insurance programs. Welfare programs were thought to be for the residual of nonemployable persons and, in general, able-bodied males were not eligible for welfare. The system was built as an optional effort jointly financed by all levels of government to provide for the categories of needy—optional because the states and localities determined the level, and even the existence, of many programs.

In the "war on poverty" efforts of the mid-1960's, it became clear that a welfare program providing only for the residual group of unemployed was not adequate. In 1965, about one-third of all persons in poverty lived in families headed by full-time employed male workers. The arithmetic is simple—a man working 2,000 hours at the minimum wage of $1.60 per hour would earn $3,200, which is below the poverty line for a nonfarm family of four. As many as one-half of the working poor have families of six persons or more. Moreover, jobs at minimum wage levels are characterized by lay-offs, short

F. 89

weeks, and seasonal unemployment. There were perhaps 10 million full-time jobs in 1965 that paid less than the federal minimum wage.

The war on poverty efforts were focused primarily on strategies to create long-run income opportunities. Partly as a result, today's income maintenance programs differ only in degree from those of the past. Their inadequacies fueled the debate that has focused on the recommendations of the President's Commission on Income Maintenance Programs and the administration's Family Assistance Plan, presented in the summer of 1969. It is significant that the concept of helping the working poor is prominent in both. The Commission's plan would assist poor people, working or unemployed, whether or not they support children. The administration's plan would assist only families with children.

IMPACT ON RURAL AREAS

I assume that nationalized welfare means:

1. Standard minimum welfare payments. Some states would have higher than minimum levels, but no state would have lower levels.
2. Nationwide eligibility standards.
3. Income maintenance payments that would be available to the fully employed who continue in poverty in spite of their work income. This means that the earlier concept of a 100 percent tax on the earnings of welfare recipients would be reduced for a limited amount of earned income.

To analyze the impact of nationalized welfare on rural areas, I will also assume:

1. Most of the benefits would go to families with dependent children.
2. Considering both farm and nonfarm rural poor, about 45 percent would be eligible for participation (compared to about 20 percent participation in 1967). This is a rough guess at eligibility under the Family Assistance Plan for rural farm and nonfarm families.
3. Of the remainder, about two-thirds would be eligible for some other assistance programs such as aid to the disabled.
4. About 20 percent of the rural poor would not be eligible for any program.
5. Program *participation* would be substantially lower than

program eligibility, and program participation in rural areas would be 5 to 10 percentage points lower for rural than for urban areas for three reasons. First, rural people would have greater difficulty in conforming with program requirements because offices are distant and transportation difficult. Second, some program requirements, such as registration at local employment offices, may be more difficult in rural areas (many counties—about 1,000—have no employment office). Finally, lack of information or uncertainty, unwillingness, and other personal reasons are likely to prevent participation.

The gross impact of nationalization of welfare programs can be indicated by the program dimension of the proposed Family Assistance Plan. As of September 1970, we estimated that the program could provide about $1.5 billion worth of cash benefits for 1.4 million rural families in 1971; that is, rural families would be eligible for this amount of benefit. This would mean an increase of $0.9 billion in benefits and 1.0 million more eligible families than in 1969. Other proposals with more liberal proposals involve substantially greater dollar benefits.

IMPACT ON MIGRATION

The local impact of nationalizing welfare has been widely discussed in the press this year. *Fortune Magazine,* in the July 1970 issue, calls the administration's proposed plan a looming money revolution for the South. It says the program would have an explosive effect on incomes and would give a powerful boost to black political movements all over the South. The report also says that, in spite of expectations of both Northerners and Southerners, the program would merely stabilize population patterns and not trigger a remigration to the South.

I assume that the nationalization of welfare standards includes both changing a fundamental concept and liberalizing the benefits. In 1967, 20 percent of the families in poverty in rural areas received assistance (compared to 26 percent in urban areas). Thus, about 80 percent of the rural families technically in poverty were not receiving assistance because they did not qualify, because they did not apply, or for other reasons.

National welfare standards could turn the figures around by making 80 percent of the rural poor eligible for assistance. Even allowing for nonparticipation slippage, it is easy to see the impressive magnitude of the proposal. Not only could as many as three times more people than are now participating be eligible in rural areas, but eligible families could receive as much as one-third more benefits.

But would this cause a sharp change in movement—the remigration pattern some seek and others fear and everyone wonders about? Probably not.

When most people talk about welfare as an economic force affecting migration, they are talking about comparisons of benefits under various existing and proposed programs. An examination of only the Aid to Families with Dependent Children (AFDC) and food stamp programs reveals a striking variation among states in the current programs (Table 1).

TABLE 1. TOTAL BENEFITS TO A FOUR-PERSON FAMILY UNDER THE CURRENT AFDC PROGRAM PLUS FOOD STAMP BONUS, SELECTED STATES, 1970

State	AFDC Payments	Food Stamp Bonus	Total Benefits
Alabama	$ 744	$1,116	$1,860
Mississippi	578	1,188	1,766
Colorado	1,973	768	2,741
South Dakota	2,251	696	2,947
Illinois	2,566	552	3,086
California	2,534	552	3,086
Connecticut	3,007	408	3,415
New York	3,158	408	3,566

Annual payments under the AFDC program vary from a low of $578 per family in Mississippi to a high of $3,158 per family in New York. But food stamp bonuses tend to reduce interstate variations in total family benefits. Since the bonus value computation for the Food Stamp Plan takes into consideration income from AFDC payments, benefits to the family in a "low" state such as Alabama are boosted to $1,860 by a $1,116 food stamp bonus. On the other hand, because of the large AFDC payment, the New York family gets only $408 from food stamps.

In general, families in the "low" states receive about $1,800 to $1,900 annually with food stamps but only $600 to $700 per year with no food stamps. The benefit level with food stamps for the "low" states is about one-half of the $3,400 to $3,600 received by families in the "high" states. Without food stamps, family benefits (AFDC payments) in the "low" states are roughly one-fourth of benefits in "high" states.

Interstate variations in potential benefits to the four-person family are further reduced under the proposed Family Assistance

Plan with food stamps (Table 2). Family benefits in the "low" states of Mississippi and Alabama would increase roughly one-third under the Family Assistance Plan plus food stamps as compared to benefits under AFDC plus food stamps. In contrast, family benefits would be virtually unchanged in the "high" states. Under the proposed program, benefits in the "low" states represent roughly two-thirds of benefits in "high" states contrasted to one-half under the current programs.

TABLE 2. TOTAL BENEFITS TO A FOUR-PERSON FAMILY HAVING NO EARNED INCOME, UNDER CURRENT AND PROPOSED PROGRAM, SELECTED STATES[1]

State	Current Plan	Proposed Plan	Difference
Alabama	$1,860	$2,467	+$607
Mississippi	1,766	2,467	+ 701
Colorado	2,741	2,718	− 23[2]
South Dakota	2,947	2,905	− 42[2]
Illinois	3,118	3,117	− 1[2]
California	3,086	3,095	+ 9
Connecticut	3,415	3,413	− 2[2]
New York	3,566	3,515	− 51[2]

[1]Benefits include AFDC or Family Assistance Plan and food stamp bonus value.

[2]The reduction in benefits results from differences in the schedule for food stamps. In states where the AFDC payments are higher than the basic Family Assistance Plan transfer ($1,600 to a four-person family with no earned income) the state would be required to supplement the Family Assistance Plan transfer to bring the level up to the AFDC payment level. Thus, in such states the total Family Assistance Plan payment alone would equal the current AFDC payments.

On an hourly basis, the one-third increase in welfare income under the proposed programs in the "low," more rural states of Mississippi and Alabama raise hourly welfare income about $0.30 per hour (Table 3). In the more urban states of Connecticut and New York, potential hourly welfare income under both the current and proposed programs are roughly equal to minimum wages and earnings of hired farm laborers.

This picture does not change much when differences in cost of living are considered. An index consisting of the ratio of the welfare benefits to a family of four with zero income to the relative cost of living for a four-person family developed in the U.S. Department of Labor shows that the southern states have an index of 31 under AFDC and food stamps compared to an index of 45 in Chicago

TABLE 3. POTENTIAL HOURLY INCOME FROM CURRENT AND PROPOSED WELFARE PROGRAMS VERSUS HOURLY WAGE INCOME

State	Current Welfare[1]	Proposed Welfare[1]	Minimum Wage	Earnings of Farm Workers	Earnings of Production Workers in Manufacturing
Alabama	$0.89	$1.19	$1.60	$1.18	$2.81
Mississippi	0.85	1.19	1.60	1.25	2.39
Colorado	1.32	1.31	1.60	1.63	3.50
South Dakota	1.42	1.40	1.60	1.51	2.94
Illinois	1.50	1.50	1.60	1.74	3.60
California	1.48	1.49	1.60	1.85	3.73
Connecticut	1.64	1.64	1.60	1.86	3.38
New York	1.71	1.69	1.60	1.70	3.39

[1]Represents the annual benefits under the programs as shown in Table 2 divided by 2,080 hours.

and 50 for New York City. This could be interpreted to mean that under the present program a family *could* be 19 percentage points better off in New York than in the South, that is, their income would be 19 percentage points closer to the cost of the "low living standard" for a four-person family in New York than in the South. Under the assumption of the Family Assistance Plan, the southern family would go up to 41 (from 31) on this scale, while the New York family would remain at 50.

The question remains, how much better off, or worse off, do people think they will be living on 41 percent of a "low living standard" in Alabama than on 50 percent of a "low living standard" in New York? Obviously, pressures to migrate would be less, and perhaps significantly less. But their full significance is unclear. These families would be vastly better off, of course, if they could work full time as production workers in New York. But they would also be better off working as production workers in their own state.

Our research has given us very little insight into family decisions about where to live. For some people there is a strong preference against moving. A very great disparity in income will be tolerated before these people move. Other people have a strong attraction and curiosity for new and different places. These people frequently will move in the face of solid evidence that there is little opportunity in the new environment. They may prefer the urban to rural, prefer almost any change to the present situation, or simply feel confident that they can compete well enough to improve themselves even if competition is tough as long as opportunities are greater.

These are complex, mostly social considerations. Evidence is sparse on the balance of these factors and how it would be affected by a changed welfare system. The evidence at hand suggests that economic pressures to move would be reduced by the proposed Family Assistance Plan. It also suggests that the change would be limited.

CONCLUSION

Nationalization of welfare means, for practical purposes, standardization of only minimum welfare standards. Some states are likely to provide additional benefits for persons and families in poverty.

The economic incentive for the poor to migrate would be reduced substantially by such standardization. Clearly, noneconomic forces would play a major role in deciding the question. Welfare programs are generally administered locally. Local social tensions can and probably do overcome the best intentions of lawmakers and national and state program administrators in some cases. The needy family that is declared not eligible for assistance has a very strong economic incentive to migrate if they think they would be eligible for help somewhere else. The incentives are economic, but the cause is not. Nationalization of the program may make more money available and broaden eligibility criteria, but local administrators still would be expected to play very important roles in deciding how many and which people are served by the program.

On the economic side, the principal economic forces that put pressure on poverty families to migrate are the same as those which affect community and regional growth.

Rural areas in the South were experiencing much more economic growth in the last part of the 1960's than in the 1950's. Preliminary census data indicate much better population retention in the Southeast than in most other rural areas. If the census bears this out, it will appear that the black and rural migration of the 1950's has stabilized. If this has not happened, odds are that it soon will.

For much of the rest of the rural United States, the picture is less optimistic. Job growth probably will be concentrated in the urban or urbanizing areas. In the Great Plains and in many of the sparsely settled areas, growth will likely be slow.

In all of these areas, economic forces would be expected to be the dominant feature. Population will follow jobs, and job growth will follow current patterns of economic activity. On balance, the

proposed welfare program would have very significant impacts on some areas. But the changes probably will not lead to remigration to the South or elsewhere. Important as such changes could be, they almost certainly will be less important than the complex of economic and social forces that shaped the rural-urban migration of the 1950's and the urban and regional growth of the 1960's.

PART IV

Environment and Quality of Life

THE NONURBAN ENVIRONMENT, POLLUTION, AND THE QUALITY OF LIFE

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The rubric for this discussion stakes out a large domain. At the outset we need some framework which indicates the relationships among the various areas of concern to help us develop responses that are both consistent and coherent. Often any resource allocation or planning problems arising in rural areas are thought to be manifestations of agricultural activities and events, and the nonurban environment still tends to be regarded as the "agricultural sector" concerned primarily with the production of food and fiber. This framework simply is inadequate. It neither corresponds to contemporary realities, nor does it provide the breadth of scope needed in searching for efficient and equitable responses to the new forces on the rural scene of this country.

Today agriculture represents only one use of the nonurban environment. Demand for nonagricultural goods and services has been growing rapidly and is causing changes in rural land use practices. The demand for such nonagricultural uses as recreation, second homes, and the protection of aesthetic or historical features in the landscape is large, and is growing more rapidly than demand for rural environment use induced by the markets for food and fiber. This fact needs to be reflected in our public ground rules for agriculture and for land management generally. When the promotion of agricultural use is directly competitive with other uses, we can no longer simply invoke a presumption in behalf of agriculture. Its impact on the quality of the nonurban environment from the standpoint of other uses must be assessed, and reflected in the policies and programs of public agencies.

Some of these connections between agricultural practices and the quality of the rural environment are obvious and fairly widely recognized. For example, the adverse side effects of certain pesticides on other claimants to rural resources are well known. Less prominent, but no less pervasive, are subsidized agricultural practices which preempt rural environments from other, nonagricultural uses. For example, recreation and scenic amenities are often eliminated by river impoundments for irrigation water, for which economic rationale would be weakened, if not demolished, were world market commodity prices used in the calculation of irrigation benefits. Another example

of such connections between agriculture and other environmental uses would be the drainage of "potholes" in the Upper Midwest which formerly provided important perching and resting areas for waterfowl in the midcontinental flyways. Here, ironically drainage is subsidized through ACP payments, while the acquisition of additional wetlands —sometimes secured under lease from farmers—is financed by public wildlife or fish-and-game agencies.

What are the consequences of these multiple demands upon the same environmental base; of competitive production interrelationships; and of environmental uses which entail major external costs? While we do not know the full specifics of these consequences, we do know that our rural resources will not be used efficiently unless these consequences are taken into account in some fashion by our agricultural and land use policies.

On the practical level there are several things we can do—even though we must labor under the handicap of highly incomplete information. We can try to identify the principal competing demands for the rural environment. We can try to identify alternatives to current agricultural and other land use practices which might be less pre-empting of the environment for other uses. If this is not possible we at least should be able to identify where major "crunches" are likely to occur and think hard about programs and policies which might be helpful—even though they may take the form of moratoria until we can learn more about these competitive confrontations.

This would represent a substantial accomplishment, for generally we do not perceive problems until they pain us. Even then, we may go through a period during which apologists for the status quo endeavor to convince themselves and others that all is well. Given the increasingly rapid rate at which broad changes in environmental use can occur, time is of the essence in securing the kind of information indicated above and using it as the basis for specific public action when existing allocative mechanisms are found to be inadequate. The story of strip-mining and of chlorinated hydrocarbons provide cases in point.

When once these environmental problems are perceived, we have a great tendency to plunge into programs and policies without an adequate underpinning of fact. This tradition of "ignorance in action" usually entails some energetic experimentation with different kinds of policies, but often establishes precedent and momentum difficult to reverse if we subsequently discover our policies were pointed in the wrong direction. It is the responsibility of agricultural extension and other groups serving our nonmetropolitan communities to identify

significant conflicts in rural land uses—either existing or potential—and to stimulate research on alternative ways in which these situations can be managed. Rarely will we have unequivocal answers, but we can make a systematic effort to be as well informed as possible before lurching into policies.

Let us now move on to issues of pollution. This is perhaps the main focal point of contemporary environmental concerns. There is good reason for the central position pollution occupies in our minds and newspapers—it is with us and exacts high costs. Often it is discussed in a partial context, and policy recommendations derived from such discussions generally are less than fully effective. For example, in many public jurisdictions, including the federal, water pollution is recognized and an agency is established to reduce it. Similarly, air pollution is recognized as a scourge to contemporary society and an air pollution control authority is created (at the federal level within an entirely different agency). In a similar fashion an office of solid wastes is studying ways in which pollution in that form may be mitigated. If we recognize pollution as the presence in the environment of certain substances—usually waste materials of some sort—in an objectionable quantity or form, we can see readily that a reduction of pollutants in water may simply shift the pollutants from the water into some other part of the environment.

Public efforts to eliminate air pollution or water pollution may thus simply shift the problems around with little or no net improvement. On the other hand, if the problem is cast as one of managing the generation and disposition of waste materials, new options become apparent. Wastes are created in production and consumption activities and their volume can be reduced by modifying production and consumption processes (for example recycling of material or reduction of packaging), or making the goods produced more durable.

Also, the natural environment does have a limited capacity to assimilate wastes without adverse consequences. It clearly is a resource in the same sense as minerals, timber, or good soil, and should be allocated efficiently to competing production and consumption activities. In some limited instances we can increase the assimilative capacity of the environment—for example, this is done in river systems through augmenting their natural flow so they can handle larger levels of biological oxygen demand. Once the assimilative capacity of the environment has been exceeded, plant and animal life suffer harmful effects, and we have pollution in a practical sense.

Now within this scheme of things we have several options: (1) we can produce and consume in a way that generates less waste ma-

terials; (2) we can manage our waste materials (dispose of them in solid, liquid, or gaseous form) so that the total assimilative capacity of the environment is efficiently utilized; (3) we can geographically isolate waste-producing activities in parts of the environment where nobody is around to be harmed; and (4) we can to a limited extent increase the capacity of the environment to assimilate wastes.

The fact that we have exceeded the assimilative capacity of many parts of our natural environment—especially in our urban areas—raises particular issues for managing and organizing our rural environment. For example:

1. Fertilizer and pesticides are believed to be harmful to the environment. To what extent can they continue to be used without posing a pollution problem? What social control measures could be invoked to mitigate the pollution problem? How can agricultural production processes be adjusted to "compensate" for bans or limitations placed upon pollution-causing agricultural inputs? What will be the impact of such bans, prohibitions, or controls on real production costs of principal U.S. agricultural commodities?

2. The urban environments suffer most from pollution and associated congestion. One alternative response would be to locate in the rural areas highly polluting activities which provide goods or services needed in urban areas—for example electric power generation with its thermal and sulfur dioxide pollution. To what extent would a national trend in this direction require new controls on land and water use in rural areas to prevent simply a "displacement of pollution" to less populated areas?

3. With the length of the work week declining and disposable income and leisure time increasing, many Americans are establishing second homes in rural areas. These communities tend to have peak population during the summer months and often impose on a relatively small, nonaffluent rural community high costs for services to the summer residents. Are policies needed or available to protect these communities from a seasonal cycle of boom-and-bust, and to distribute more equitably the costs of social services?

4. In a more direct and immediate effort to escape the often high-pollution of urban areas, the central city is being abandoned for the suburbs, with a consequent rapid conversion of land from rural to suburban uses. Special problems arise in such situations due to rapid increase in land values. What kinds of

policies will result in the efficient transition of land use to higher valued uses without excessive displacement of rural activities and land use? Associated with this is the whole problem of how rural amenities can be preserved in the subsequent suburban use of presently rural lands. This is especially important when open areas have a potentially high value for park and recreation purposes, or when farm abandonment in the face of property tax increases results in open fields reverting to scrub trees or bushes.

We have touched very briefly upon two of the three topics suggested in my assignment—namely, the relationship between agricultural and nonagricultural uses of the rural environment, and problems of pollution which create a need for policies in the rural environment. Questions of the quality of life are directly related to these two topics, and perhaps pose a more direct challenge to agricultural extension.

The term "quality" signals a dramatic shift in the type of problems with which contemporary America is faced. Previously, we tended to think of the environment as providing inputs for the production of goods and services, and much research effort was focused upon questions relating to the adequacy of their supply. Now a far subtler and more pervasive set of environmental problems are confronting the country—namely, those affecting the quality of life. The phrase enjoys broad popularity; its place in news media and political platforms seems well established. Clearly it suggests a condition of life or a context for living (as distinct from a "living style") which the public values highly yet which traditional planning and management have not adequately provided. In some way our old notions of resource management and environmental planning have not embraced what we now refer to as the "quality of life."

The very words suggest ambiguity and a lack of specificity. This in itself poses a challenge to discover or develop local institutions through which communities can determine the actual conditions of their life, the quality standard they would like to achieve, and how much they are willing to spend to improve the quality of their immediate environment. These decisions are very difficult to reach, but cannot be avoided if a community is to plan for an environmental setting it wishes.

The most important aspect about these questions is that with the exception of measuring existing conditions, these questions cannot be answered by an expert's analysis. In the past many community environmental problems—for example, those relating to developing an

adequate water supply or even recreation systems—could be analyzed by an expert and a reasonably efficient program prescribed on the basis of such analysis. Questions involving the quality of living can only be answered by the community which perceives its own existing environmental conditions and can assign a value to their improvement. In short, any institutional and organizational effort for coping with quality of the environment or quality of life issues must at the outset arrange for direct participation of all parties concerned in prescribing desirable programs of environmental management.

That we are not familiar with problems of this sort may explain some of our frustration with existing institutions which were designed initially to execute environmental programs devised by experts outside the community. The term "participatory democracy" is more than an idle political slogan; it reflects the very direct and acute need for community institutions which provide forums where perceptions of the quality of environment can be discussed and debated by members of that community. Such a process may well entail the modification over time of early perceptions, but it should lead toward a common understanding of what elements of quality are important to that particular community.

A similar type of forum is needed if the community is to decide upon its quality targets. If the immediate issue is a river with low levels of dissolved oxygen, how many parts per million of dissolved oxygen does the comunity wish its river to have—three, four, or five? The community, of course, needs to know what these different "qualitative levels" really mean in terms of activities each level would make possible. Recently the Philadelphia municipal area made such decisions about the Delaware River. In that particular instance a referendum was held to establish a water quality target—and at the same time determine how much the community was willing to spend in order to achieve the higher level of water quality. The levels of boating, fishing, and other water-based recreation which would be possible at different levels of quality were presented together with the price tags of achieving those levels of quality.

I submit that communities throughout the country will face an increasing number of important questions relating to the quality of life, and will require ways of meeting together for discussion to reach consensus about the kind of environment the community has, the sort of environment it wants, and what it can do to bridge the gap. I think the Agricultural Extension Service can help these communities, though I am not sure that a traditional extension specialist or county agent can fill the bill. The situation calls for a person who can implant ques-

tions and facilitate debate and rational discussion, rather than a person who can supply the "answers." Herein lies a major challenge and opportunity for the land-grant university and for agricultural extension. Certainly qualitative problems—how they are perceived and how we respond to them—pose a research challenge.

The growing prominence of "quality" problems suggests quite strongly that extension personnel need skills which can help them elicit from individuals and the community their perceptions of environmental conditions. In short, I think we need to review and possibly redesign some of our curricula in order to produce expertise of this type. Without it we will find ourselves trying to address qualitative problems with obsolete ideas and institutions. If these aspirations for a better quality life in America are stifled, and if we fail to adequately reflect them in public policies and programs, those who hold these aspirations likely will seek relief through confrontation and direct action. Such tactics may produce change, but they too easily can escalate into chaos.

POPULATION AND ENVIRONMENT

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The extraordinary flood of information, opinions, and pleadings that has appeared in the last year on the subjects of population and environment—whether considered as separate topics or in their relation to one another—makes it difficult to say anything new on these issues. I will focus on some of the situations, key trends, and relationships that I think are relevant for an audience having a primary interest in rural and small town society.

The potential severity of pollution or other environmental impairment is obviously determined in part by population size. National boundaries are finite and the larger our population, the larger problems of waste disposal, pollutant control, or energy consumption will be—at least in the absence of a declining level of living. But environmental problems are not confined to densely settled areas, nor even to growing areas.

An end to population growth for the nation—and in time for the world—is a widely held objective today. Ultimately, there are limits to the number of people the world can accommodate under any standard of living. In our nation, however, it is not the rate of present or foreseeable population increase that is the paramount cause of environmental problems. Perhaps the best example is in the area of electric power production. Since 1950, electric energy production has increased by 300 percent, while population has risen 34 percent. Thus only one-ninth of the increased use of electric energy—with its serious attendant problems of air and water pollution and fossil fuel extraction and depletion—can be ascribed to population growth. The rest is the result of enormously increased per capita usage. The projection for the rest of the century is about the same. Thus, huge additions to present capacity will be needed, but only a fraction of the need will stem from increased population.

Natural gas usage in the same twenty-year span rose by about 250 percent, and use of crude petroleum by 100 percent. The number of automobiles and trucks in use has more than doubled since 1950. The percentage of families that own more than one car has gone from 7 percent in 1950 to 27 percent in 1969 and is still steadily rising. Estimated water use doubled from 1950 to 1970, with the largest single component of the gain resulting from the increased needs of

steam electric utilities. It is our rising standard of living that is bedeviling us in these areas of use.

The volume of farm production for human uses rose by 44 percent, only moderately above population growth. But to achieve this output, the application of fertilizers was doubled and that of pesticides apparently increased even more.

These are simple measures, but the wide disparity in growth rates between population and consumption items leaves no question that the rapid growth in demand for the items mentioned is due primarily to increased usage per capita. Thus, although we will add 100 million to the population by the year 2025—even if every woman entering the childbearing years between now and then has only enough children to exactly replace the parental population—this potential growth is not the crux of our environmental quality problems.

If there are too many people in the nation today, much of the blame can be placed squarely on rural people. Their level of childbearing has been considerably above the national average. Although rural women of age 35-44 comprised only 27 percent of all women in the nation of that age in 1960, they were responsible for 66 percent of all the childbearing from that age group that went toward increasing the nation's population rather than just maintaining it.

Much of the character of the human environment is determined by the extent and form of population concentration, rather than just by total size. The dominant worldwide trend has been rapid urbanization, in part caused by the decline of agricultural jobs in all reasonably developed countries, plus the movement to the cities of the surplus rural population created by high rural birth rates. These trends have been largely independent of political systems or agricultural policies. The forces of technological change in farming and the higher income earning opportunities in urban areas have transcended national and cultural boundaries.

We have all seen some of the major urban concentrations in this country and many of us have lived in them, but it still comes as a shock to many to hear that in 1960 the U.S. urban population, amounting to 70 percent of the total, occupied just 1.1 percent of the nation's land area. Yet, the density of urban settlement per square mile is actually less now than one or two generations ago—both in the central cities and the suburbs. It is the scale of urban settlement that is so much larger, with 33 of our metropolitan areas now containing a million people or more each, and many of them merging into one another to form chain-like urban regions.

It is this scale of settlement that seems so uniformly to result from the world's present forms of social and economic organization that poses the most obvious physical environmental hazards, such as air and water pollution. These hazards are at least susceptible to measurement and in many cases to alleviation, given enough money and time. But it is in more subtle and less predictable or manageable ways that the massing of huge populations many have psychological consequences that will challenge the public order and the ability of the society to provide adequate remedies for social ills.

I find it interesting to see how far back and how pervasive in human history firmly held views were expressed about the relative merits of rural and urban environments. In the fifth century B.C., Sophocles assured us that "The first requisite to happiness is that a man be born in a famous city." Three centuries later, in the book of Ecclesiasticus the question was asked, "How can he get wisdom who holdeth the plow?" At a later time Sydney Smith, the nineteenth century English writer, wrote that he had ". . . no relish for the country, it is a kind of healthy grave," and our own Henry Thoreau claimed that, "It makes but little difference whether you are committed to a farm or a county jail." On the other hand, Rousseau was adamant that "Cities are the sink of the human race," and his admirer, Jefferson, offers several quotes about the virtues of farmers and the evils of the city. "The mobs of great cities," said our founding father, "add just so much to the support of pure government as sores do to the strength of the human body." And in the 1950's Ezra Taft Benson assured us that America's rural people " . . are her bulwark against crackpot programs and foreignisms."

There are some hard data—social indicators—that can be mustered in support of comparative evaluations of the rural and urban environments. But they are not conclusive. Urban areas look best on some of them and rural areas on others. Large urban areas are usually superior in average family income, in access to goods and services, and in variety of employment opportunities. Most rural and small urban areas appear to have less crime, violence, and general social pathology, and less air pollution or traffic congestion. In the final analysis, the preferred environment is—as it has been over the centuries—a matter of personal taste and conviction. One fact is certain. We cannot live exclusively in either of these settings. Both are essential to our civilization.

The present U.S. population is estimated to be about 204.7 million. Of this number perhaps 63 million, or three-tenths, live in nonmetropolitan territory, that is, outside of cities of 50,000 or more people and the areas closely associated with them on a commuting

basis. The nonmetropolitan areas contain a declining proportion of the total population, not only because they have less real growth than the metropolitan areas, but also because some of their growing sectors become metropolitan in the process of growth and are reclassified.

I estimate from the preliminary 1970 census returns that the nonmetropolitan counties gained in population about 4.6 percent during the 1960's. This is less than half as rapidly as these counties would have grown if there had been no net outmigration from them in the decade. Their failure to retain the equivalent of their excess of births over deaths is indicative of unsatisfactory social or economic opportunities in them, or of a disparity between the typical life chances and life style that they offer and that to which their young people aspire.

If we look beneath the overall population change of nonmetropolitan areas, we find that the farm population within these areas dropped by about 4.5 million, or about one-third. The nonfarm people of nonmetropolitan areas, who comprise by far the great majority of this population residence class, increased by about 16 percent, or more than 7 million. This is clearly above the growth that could have resulted from natural increase alone. The nonfarm component of the nonmetropolitan population has been growing more rapidly than for the country as a whole, but the extent of this growth has been masked by the continued rapid decrease in farm people. The diminishing farm base will be less capable in the future of offsetting gains in the nonfarm population—assuming that such gains continue. Thus, we may well see a future growth rate in nonmetropolitan areas as a whole that more closely approximates that of the nation as a whole.

Change in local population size depends largely on economic change. Between 1962 and 1968 the number of wage and salary jobs in private nonfarm industries increased by 30.2 percent in nonmetropolitan counties, compared with a growth of 24.6 percent in metropolitan areas. The greatest comparative growth in nonfarm jobs in the nonmetropolitan areas was in manufacturing, but comparative gains were made in services and trade as well. The high rate of nonfarm wage and salary job growth extends even to the counties that are completely rural in population, having no towns of 2,500 or more people. Most of the completely rural counties failed to grow in population, however, because their dominant industry—agriculture—continued to drop in employment.

At the moment, the continued exodus from farms and from the southern coal fields, together with occasional other factors, has left about 1,500 counties, or half of the country's total, with fewer people

in 1970 than in 1960. And about the same number declined in the 1950's. As a result of the net migration trend toward metropolitan areas and away from the most heavily rural areas, the distribution of counties by population size has been steadily altered over the last thirty years. There has been a decline in the number of modal size counties—those with 10,000-50,000 people—and an increase in the number of both counties with more than 50,000 people and those with less than 10,000 people. Because so many agricultural and mining counties have dropped in population, there are more people living in counties with fewer than 10,000 residents today than there were thirty years ago.

To alter substantially the distribution of people in the United States by size of community may well not be possible, at least in the foreseeable future, nor even desirable. Large cities have emerged for very compelling reasons, and the enormous investment in cities is not going to be dismantled. What is perhaps not only feasible but necessary, however, is to insure that in a metropolitan dominated society the nonmetropolitan areas are at least given the chance to provide maximum working and living opportunities for people who prefer to reside in them.

Every opinion poll taken seems to indicate that the actual distribution of people does not conform to the popular wish. The responses in the now famous Gallup polls on the subject have repeatedly shown that more than half of the people would prefer to live in a small town or on the farm. Call this nostalgia on the part of urban people who give such an answer. Call it ignorance of what small town or rural conditions are like. Call the desired living pattern unrealistic and not feasible of being achieved. All of these reactions may be justified. But the survey responses do indicate a strong undercurrent of dissatisfaction with urban conditions, much of which can surely be classed broadly as environmental discontent. Given the opportunity, some of the city people will act on their dissatisfaction and try life in a smaller-scale community.

Perhaps because of the overriding concern about rural-to-urban migration, there has been little awareness of the extent of urban-to-rural movement that has taken place concurrently, and of the proportion of the total rural population in the United States that is of urban origin. Data from a national survey in 1967 show that 23 percent of the rural population 17 years old and over consisted of people of urban childhood origin. There were more than 8 million such people. Some of them were essentially suburban, living in the fringes of metropolitan areas. But even in the nonmetropolitan rural population, 20 percent of the adults were of urban origin.

Rural residents of urban origin are common in all adult age groups, but more so below age 50 than above it. The educational attainment of urban migrants to rural areas is considerably higher than that of rural natives. Twenty-five percent of the inmigrants have finished at least one year of college compared with just 10 percent of the rural natives. A majority of the inmigrants hold white collar or craftsmen jobs. As a result, the incidence of poverty among urban migrants to rural areas is very low (11 percent), and only half as high as that of rural natives (22 percent). The number of urban-to-rural migrants and their good economic status indicate that such migration is attractive to a substantial number of people and that they are already an important element in the economy, labor force mix, and general vitality of rural communities. Efforts to foster the movement of urban people to rural or small-city areas need not begin from scratch. There is an established base of such people.

A further element in the relationship between population distribution and environment is that of differences in regional preferences. For example, it has been commonly observed that most areas of the United States that have mild winters have been growing rapidly. This growth has by no means been limited to the movement of retired people.

Peter Gould, a geographer, has developed a series of "mental maps" of the United States based on the perceptions of students from different universities who were asked to list their preferences for states in rank order. From these rankings maps have been constructed that reflect for this population group the relative residential desirability of various areas. A remarkably similar map emerged for most groups of American students. The West Coast is an area of high desirability, with the rating then going downward in Utah but rising again in Colorado. There is a general decline in rating in the Great Plains, with a low in the Dakotas. Near the 100th meridian the rating rises toward the Northeast but drops toward the South, except for Florida. Preference maps for students from California, Minnesota, and Pennsylvania are generally similar to one another, except that each gives high ratings to the home state. The map for Alabama students shows the North as undesirable, and the South rather differentiated, with high loyalty to Alabama but mixed ratings for other southern areas. In the case of North Dakota, even local loyalty does not make the home area the most preferable. The areas of greater attraction for North Dakotan students were the West Coast and Colorado.

Such variations in residential preference would be expected to play a role in decision making with respect to migration. Presumably, areas of high preference would be areas of net inmigration, unless their

economic condition was known to be unfavorable. Areas of high level preference, but low national image, such as Alabama, could still have ample population growth if their economies were healthy enough to hold the locally reared population in the areas. Areas such as the Dakotas, on the other hand, are handicapped at present not only by low economic growth, but by the negative image of the region held by many of the natives as well as by outsiders. It is probably valid to conclude that the population losses that presently characterize the entire Northern Plains stem from both the economic conditions and the perceived environmental disadvantages of the region, and that more than average economic developmental assistance and intervention would be required to overcome these drawbacks.

The population distribution policy stance of the present administration has been to encourage the growth of population in rural areas. The most notable instance of this determination was expressed by the President in early 1970 when he spoke of the desirability of not only stemming rural-to-urban migration but reversing the flow. Specific recommendations for action relating to the location of economic growth—and thus of population growth—have not yet been made, but the next Congress may receive legislative proposals on this subject.

The weight of much outside opinion seems to heavily favor the growth center, central place theory approach to development, but with explicitly pessimistic views about the prospects for nonmetropolitan scale communities. In addition, nonmetropolitan areas are rather casually described as being within commuting distance of metropolitan centers and thus adequately served by further metropolitan development. The growth center approach per se is not inimical to nonmetropolitan interests. But unqualified pessimism about the potentials of nonmetropolitan cities and areas is based, I believe, on a seriously inadequate perception of what is transpiring in many of them. The assertions about commuting are usually based on the maximum range of commuting found, without regard to whether a meaningful proportion of workers is involved. In short, population distribution policy discussions are not well served by oversimplified notions of nonmetropolitan conditions and of the interrelationships of such areas with metropolitan centers.

Beyond economic development considerations, the public still views rural areas as having—and envies rural people for enjoying—clear water and clean air. And freedom from urban forms of trash and dirt are presumed rural amenities, too. But our increasing awareness of the existence of rural pollution problems calls for greater candor in acknowledging such problems and greater efforts at their control or correction. By virtue of their smaller scale, rural and small-city

areas are never likely to equal larger urban areas in availability of services to residents or variety of overall economic opportunity. And the rural-urban income gap may never be closed. This makes all the more imperative attention to the quality of the rural physical environment if the superiority of this asset is to be maintained, not only for the satisfaction of present and would-be rural residents, but also for the periodic enjoyment of the masses who occupy the ever-spreading cities and suburbs.

INSTITUTIONAL ALTERNATIVES FOR IMPROVING OUR ENVIRONMENT

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The plan of this paper is to explore popular approaches to environmental problem definition. One I have called the engineering mentality, which frequently omits reference to man. Another is the gut feeling approach, which tries to draw a dichotomy between efficiency and human values. The institutional implications of these approaches will be traced. This is followed by an analysis of the role of collective action, in which I shall criticize the polarization of the issue into one of more versus less government. I shall also criticize the present focus of interest group bargaining on specific governmental action and projects rather than on system-wide rules and policy. Then, a suggestion is put forward for a more fundamental kind of reformation in our property rights. Finally, I shall explore the institution of policy education and its role in environmental rule making.

MAN AND HIS INSTITUTIONAL ENVIRONMENT

This country—its people—is sick, and it will take big changes—yes, a reformation—to make it well. The sickness may be described in terms of substandard houses, race riots and property destruction, numbers of families living in poverty, respiratory ailments related to pollution, and the death rate of black infants. All of these ills suggest a need for technological solutions. For example, we can look for a construction technology breakthrough to solve the housing problem, better equipped police to control riots, more doctors to reduce infant deaths, better engineered highways to reduce traffic deaths, or better weapons to end the Vietnam War.

Another dimension of the problem is described more in terms of human relationships. As of April 22, 1970, there were already 142 murders in the city of Detroit and 50 suicides. Murder seems to be a lower social class phenomenon, while suicide is shared by the upper classes. U.S. Public Health Service reports estimate that one in twelve persons in the United States is suffering from some form of mental illness. Many people are on drugs or tranquilizers, or are alcoholics. There are no figures on alienation or general dropouts, or an index of uptightness. These afflict both the rich and the poor.

If we look at mankind as the ultimate product and measure of our total environment and economy, we cannot help but be depressed with our condition relative to our potential. We have been using our resources largely without consideration of the opportunity costs in terms of the total human being produced. There is more than marginal room for improvement in the human product, and its realization involves much more than technological manipulations or small institutional changes, which often go together.

The issue is how far do people want to go in changing relationships among themselves. Institutions are simply collective action for relating people to each other in an orderly fashion. If we believe that the problems of environmental management are just pimples on a basically sound body, simple extensions of existing institutions will do. But if we believe that the problems are more serious, then the institutional analysis is far different.

THE ENGINEERING MENTALITY

In the approach to environmental management which might be called the engineering mentality, questions about the overall direction of the management effort are seldom asked. Attention is given primarily to alternative techniques and means. This is characteristic of much public works planning. The population trend of a given area is projected, then put together with a per capita consumption rate, and a need for the product is stated for some future period. The problem then is only to find the best method for meeting this need. If the methods have an impact on the environment, the problem is one of amelioration and finding the method with the least objectionable effects. A common feature of this approach is that the question of why should this future population be in this location at all is never asked.

We can see the engineering mentality in such agencies as the Bureau of Public Roads, Corps of Engineers, or even some colleges of agriculture. It helps to have a single purpose agency tied to one kind of product with a vertical tie to a particular pressure group. That group may not be a product user, but an input supplier, such as the concrete manufacturers in the highway program or the lime producers in the Agricultural Conservation Program.

The engineering mentality strongly supports the institution of ad hoc public spending over other institutional alternatives. For example, if there is a perceived flood control problem, it is suggested that structures be built with public funds. Zoning to redirect locational decisions is not part of the approach, and there is little reference to a

population settlement policy. This attitude also tends to support even a single variety of technical solution. Every agency is trying to get on the environmental bandwagon. But that does not mean they have changed their programs much. The Corps of Engineers and the Soil Conservation Service are perfectly willing to add water quality to their multiple purpose dam water storage needs. This will be used to show that what the agencies wanted to do anyway now generates more benefits than before. Whether it is the cheapest way to improve water quality or whether the locations are the most desirable are questions asked by troublemakers and obstructionists—not by the engineering mentality that gets things done.

The engineering attitude seldom challenges existing power relationships. The present private landowners and manufacturers of inputs tend to be served. For example, it favors the institution of public acquisition over use of police power regulation. This is illustrated by the Highway Beautification Act of 1965, which provided for removal of billboards, but required the state to pay just compensation for the taking of the *right* to erect and maintain such signs. Supporters of this policy do not inquire how the landowners came by this right which was so freely acknowledged.

The engineering mentality is not solely possessed by engineering organizations. Let us examine the role of the courts in this regard. In a particular case in New Jersey, a pipeline company wanted to put a line across a wildlife preserve owned by a nonprofit organization and maintained for esthetic use. There is a great thrust in case and statutory law supporting condemnation for utilities. The general rule has been that the only actionable question is the amount of compensation. The courts are exceedingly reluctant to permit litigation over the necessity or wisdom of a condemnation or the way it is exercised. There is surely something to say for cutting off interminable arguments over such questions as alternative sites, since each owner would like to shift taking to a neighbor. Nevertheless, this is characteristic of the engineering attitude.

In this particular case, the wildlife preserve was able to get the court to hear the case. The pipeline company wanted to lay its line along an upland forested route requiring tree removal and causing erosion and siltation of a marsh area. The wildlife preserve management would have preferred no pipeline at all over their area, for any location affected the natural habitat. Yet, they knew they could never win that one, so they argued that a lowland marsh route would affect the wildlife values the least since the danger of erosion was reduced. In the course of the trial, the judge discovered another alternative, namely, with proper techniques and care the upland route could be

followed with minimum damage to the environment. The wildlife people asserted, but could not show factually, that the marshland location would create less damage to the environment than the careful use of the upland route. The pipeline company agreed to follow certain techniques and protective measures and the court allowed them to proceed with their preferred location.

If public groups want to change environmental management, they had better be prepared to present to the courts (or to any decision point) concrete alternatives with clear connections to environmental results, and not mere assertions. They will need information which shows alternatives in increments gained and lost. In this case, it was obvious that the pipeline would be more costly to lay in the lowland. The court did not have to face the issue of weighing this extra cost against the incremental environmental damage since no evidence was presented to show that there was an incremental damage difference between the carefully utilized upland site and the lowland site. It did not explicitly examine the issue of extra costs, but in effect ruled that the extra cost of more careful digging and revegetation were offset by mitigation of wildlife damage. The court got a feel for the size of this extra construction cost by the fact that as the trial proceeded the pipeline company volunteered to use the ameliorating practices.

Joseph Sax, a legal scholar, observes that the court's ability and willingness to intervene rested upon "the assurance that the case would not be merely a vague debate over values, but rather a rigorous comparison between two precise and available alternatives with specific evidence of specific damage to be used to compare them." On the face of it, this seems consistent with the above argument for presentation of specific trade-off and cause-effect information. But, it is subject to an engineering mentality interpretation. Just what "precise and available" alternatives are to be considered? The case suggests that not building the pipeline at all is not in the court's thought pattern. How about an alternative energy source which does not require soil removal to provide for transmission? How about putting the population growth somewhere else where it can be served with less environmental disturbance? Where will these questions be considered? Sax suggests that we should not expect it of the courts, nor are they the appropriate institution. He says courts "are not only professionally conservative, but they are genuinely and correctly concerned about their competence and their proper role in such disputes." While there are exceptions, the courts seem better able to handle decisions involving more marginal alternatives.

Before leaving discussion of the engineering mentality, I should take care to say that the term is not meant to characterize all engi-

neers, nor is it limited to them. However, this is what their job frequently calls for, and we need competent people who can solve the problems put forward in this context. Still, it is a limited view and reaction has set in.

EFFICIENCY VERSUS HUMANITY

One attack on narrow efficiency calculation is glorification of gut feeling as an approach to environmental problem definition, that is, if our present state is the result of economic calculation, then let us turn to spontaneous action. Act, don't think! Let your instinct be your guide. One writer in commenting on proposals for new highways and tall buildings in San Francisco noted that advocates present many tables and charts to show the tax benefits and how market valued needs are met. He admonishes opponents not to play this game. Don't investigate to see if the charts are correct and don't prepare any of your own showing other effects. Simply insist that tall buildings are bad and stand (or sit-in) ready to die for what you know is right.

The consumer decision to purchase an orange, enjoy the tax benefits of new buildings, or avoid the view of tall buildings and auto smog all come ultimately to the same focus—the human personality. Man is the measure and measurer. The consumption of market goods such as steel *and* nonmarket goods such as air both affect his being. As the hip poets say, "You are what you eat."

Why should we employ intellect and economic thinking for one type of good and not another? We must test the charts and tables of developers *and* the assertions of conservationists on the same anvil of humanity. We need to create institutions to relate choices of these widely different kinds of goods, for ultimately man is a whole being and not two separate entities consuming market goods on the one hand and nonmarket goods on the other. Science becomes an input into these product and institutional choices by showing relationships and consequences. But, this does not make the choice easier, just more intelligent.

The freedom implied in the above argument is frightening to many. Policy educators should be aware of the escapes from freedom that are offered people. One is retreat to the engineering mentality, where we can pretend that no choice is really involved since what to do is merely a deduction from present population trends and consumption rates. The familiar, "you can't fight city hall," is a variety of this escape. The wrong kind of people may be produced, but that is just something one learns to live with.

Another escape is retreat to the cult of the expert. If engineers (or

economists) have caused all of this environmental degradation, let us set up some boards of ecologists to control things. We can hardly deny this new group its areas of vertical control because this is certainly the mode for regulating everything from medical standards to television. We have set up organizations that either explicitly have representatives from the professions they ostensibly control or are captured by those they are supposed to regulate. We have largely ignored how these experts come to be selected for these positions.

The fact that no one of these experts thought about the final product (which is us—the whole man) is ignored in this institutional approach. Many ecologists do not practice a truly ecological approach. They talk about interaction of organisms but frequently fail to ask what preservation of the osprey has to do with better human beings. If this question were asked, it might be discovered that fighting rats and controlling drunk drivers are more important environmental issues. Some ecologists I know would even deny the relevancy of the question since nature is a value in itself for them—again an example of making us schizophrenic, which is, ironically, nonecological. I believe that policy educators must help people learn to trust themselves, for people are the only experts on the whole man.

Another escape from freedom is to glory in unthinking gut choice. This is a sort of anticollective action in any form. In fact, community action of any kind is suspect, and all administration and authority must be reduced, if not abolished. We must get down to each person doing his own thing. There would be no eminent domain or taxation. This radical solution does not appeal to me, and I doubt it will produce the kind of people its supporters want, but its popularity is a fact that educators cannot ignore.

A less severe subset of gut choice is the attack on evaluation techniques such as PPBS (Planning, Programing, and Budgeting System) and benefit-cost analysis. Interestingly, the attack is made by some environmentalists as well as some developers. The proposition is that economic type calculation is only suitable for market priced goods, and if new values are to be taken into account, these techniques must be replaced. I believe it would be a tragedy if in our attempt to introduce new values into environmental decisions, we should abandon that part of economic thought which emphasizes systematic display of opportunities foregone. Economic rationality can insure that new values and priorities, whatever they are, will be effectively obtained. One of the reasons that we have made such little environmental improvement is the gross inefficiency in the application of those resources and energies that we have devoted to it. Efficiency calculation is not

the enemy of humane ends. Vague, hidden, ill-informed, piecemeal, and segregated specialist decision making is the real threat.

END OF LIBERALISM

Our institutions for formulating and communicating demand for publicly provided inputs affecting man's being have been largely predicated on interest groups. Our rules are based on the dogma of simple pluralism, which means that many interest groups compete for the favor of government. Present institutions tend to focus bargaining on specific public acts, programs, and projects rather than on general system rules and directional policy. Pluralism is the political equivalent of pure competition in the market. Self-regulating competitive equilibrium is emphasized with little specific attention to overall performance. This has led to loss of public confidence in government's ability to solve problems. Each organized group secures help from government in its own special area. For example, big farmers get price supports, doctors get controlled entry, industry gets tariffs, and bird watchers get wildlife preserves.

Still, as I have been insisting, man is a whole being. A person belonging to a potent group can protect his income, but that may not give him much toward a good life in total. The big farmer may secure his income but suffer poor rural community services. The doctor may enjoy his income but still get mugged (and may even have difficulty getting good medical service). Bird watchers may have preserves but never see nature in their workaday world.

We are pluralistic in the sense that no one group controls everything. But, it also means that no one has thought much about the total product—man—that emerges. Each group can use government to help supply one dimension (albeit a major one) of its members' total inputs. The things in common tend to be lost. And that is our sickness!

Solving pieces of the problem will not suffice, and even those who do relatively well by the process are losing faith in the ability of government to really make the total environment better. This is not to say that they will easily let go of their individual hold on the collective power.

We have also taken on too many good causes without a sense of priority or complementarity, and the effect is disillusionment. The environment is just one of the most recent concerns where we have extended government through new agencies, some public spending, and a few new prohibitions, and of course, many more forms to fill out. Much of this is a circus for the masses which pretends action without doing much that is measurable in people's experience.

I have not mentioned the plight of those who are not organized and who represent a hole in the pluralism dogma. They have realized that the great liberal-conservative debate over more or less government is misleading. The liberal bleeding hearts support great extensions of government which really do not deliver, for example, urban renewal, which evacuates the poor rather than building housing for them.

The conservatives have never really been against government, just against the wrong people using its power. Much of the public power serves them by such things as having a regulatory commission help a particular group to do things it could not do as effectively for itself as a completely private organization. Much of the public spending power goes for things that could be done privately, which leaves so little for uniquely public functions. This burden is producing taxpayer revolts against the general concept of government spending.

All of the above adds up to a crisis for collective institutions. People are becoming disillusioned by government in general whether they be rich or poor, young or old. Only a few die-hard liberals remain enthusiastic. They are still talking of massive new programs and new bureaucracies. But this is the end of liberalism!

PROPERTY AND COMMUNITY CHOICE

We can probably do without liberals, but we cannot do without a sense of community and collective action. We must not conclude from our failures that collective choice is to be abandoned but rather that we should choose more wisely and look to more basic institutional changes if we want a significant change in environment and man. I believe we must look in the direction of some fundamental redistribution and redefinition of property rights which form the basis for system-wide rules and policies rather than the present emphasis on interest group bargaining over individual projects and regulatory actions. A series of examples will illustrate.

Example 1. There is talk of effluent charges to control water pollution. The charge is really a rental of a resource where the owner transfers use rights for a periodic fee. If costs were associated with use of resources for waste disposal, there would be a different allocation of the resource. But there is a fundamental directional question which makes these charges function. That is whether the public owns the resource in the first place and is in a position to ask for rent.

The thrust of present property law is that right follows appropriation. As new aspects of resources become valuable, the right of use goes frequently to those who can in fact make physical use. It is

clearest in water appropriations doctrine, but it functions in other resources as well. The burden of proof to support any other result rests with the conservationist, not the developer. This is the tremendous dynamic built into present property law that is not overcome by marginal changes in institutions such as new spending programs, zoning commissions, or the like.

Example 2. Let us look at attempts to get a better environment by controlling land use through zoning. It is perhaps a bit of an overstatement, but it is not far wide of the mark to say that zoning is a failure. It fails to effectively shape developing areas. The rewards to private owners who can break the zoning from a single family residential to high rise apartment or commercial are considerable. This institution standing alone cannot resist the pressure resulting from the underlying property laws, which in effect say that the impact of community action on property values is captured by the owner. Unless we change this basic thrust of the law and deny some of the publicly created value to the owner, who did nothing to produce it, the more marginal institution of zoning will remain as it is, a monument to faint hearts.

Example 3. Another direction in which we might look for fundamental change is to pay more explicit attention to the rules for bargaining among governmental units, that is, more effective implementation of our pluralistic philosophy. We have a pluralistic philosophy of competition among pressure groups, but little attention has been given to the rules for this competition. Part of the problem may be that government is not seen as consisting of bargaining units. Some conceive of it in only hierarchical terms with lines of command running from the legislature through the chief executive to the agency. Yet, much bargaining goes on between agencies which really represent different groups.

It is very awkward for a dispute between state agencies to be settled by the courts since the attorney general would be in the position of representing both parties. This means disputes are usually bargained out in less explicit forums not open to public view. This fosters trades which are sufficient to keep sleeping dogs asleep but not necessarily to solve conflicts which remain festering even if unidentified as to source.

It is popular in many circles to support interagency planning efforts. An example is so-called comprehensive river basin planning under the U.S. Water Resources Planning Act. These have largely failed to clearly define objectives and establish priorities because each agency puts in its pet schemes regardless of the conflicts. The

plans are seldom put together by more than a staple. I believe this is because we have not first openly debated the rules for interagency bargaining. We just put them together with a gross laissez faire approach. However, if we did think through the bargaining rules, we would have to accept the responsibility for influencing performance. It satisfies some to escape by saying that whatever emerges from these interagency rituals is the best that can be done, even if lamentable. Since many interest groups are represented, it is pluralistic and that is enough of a criteria for some.

Example 4. A final example to illustrate the direction in which I think we could move if we want more fundamental changes in environment involves the role of the courts. Michigan has just passed a law which allows citizens to sue polluters or state agencies without having to show that they suffered particular and unusual personal damage. This allows action against anyone affecting the environment, even if the governmental agency responsible for its regulation has failed to act. The standard referred to in the law provides that action can be taken to protect the public trust in natural resources from impairment. Defense may show that "there is no feasible and prudent alternative to defendant's conduct and that such conduct is consistent with the promotion of the public health, safety and welfare in light of the state's paramount concern for the protection of its natural resources." Such a broad standard can be supported by people who have widely different views on the desirable environment. I believe these vaguely stated standards only lead to public cynicism and contribute to the crisis in respect for public authority and collective action.

We should not expect a great deal from this citizen suit law. The law probably would not be necessary if the state natural resource regulatory agencies had been given clear guidelines for their actions in the first place. This deficiency cannot be corrected by still another procedure with no clear statement of policy and standards. The new law begs the question of what the public's ownership claim really is. I suspect that is why the bill got such wide support. It talks of protecting the public trust in natural resources but never says what that is. Surely, there is a reference point in the common law, but this is a slow and usually marginal process. It is not the place where decisions on new directions should be made. We must look to the legislature for more precise expressions that the public recognizes its sickness and wants to make fundamental changes by redirecting resources from paper, chemicals, and steel to other things which can contribute more at this point to mankind.

The Michigan legislature has never firmly stated what resources

belong to the public although it now has facilitated citizen suits to protect the public trust, whatever that is. Perhaps this is because the public wants to escape from freedom and does not want to admit that property rights are not defined by deities but by public affirmation of who counts and has power and what common environmental outcomes the people really choose for themselves.

It was stated earlier that the dichotomy of more versus less government was not very useful. Changes in property law and more precise standards for public agencies involve government to be sure, but they are quite different from those changes that *necessarily* involve new agencies, employees, and budgets.

To conclude, those who think the use of our resources must be redirected in major ways to produce a better mankind should give more attention to institutions which fundamentally reshape the power relations of our society in certain key priority areas. This puts more emphasis on basic property rights definition which can redirect private market transactions as well as governmental bargaining and less on things like piecemeal public spending, zoning, or even regulatory bureaucracies. This latter group of institutions has its place, but success in application depends on some fundamental restatements of basic property rights in resources. For example, we either say appreciation of land values due to public action belongs to the private owner or not. The public either owns the paramount use rights in small trout streams or it does not. Much of the rest of the environmental control trappings are marginal. They only keep the masses quiet while providing jobs for lawyers, planners, and economists.

ROLE OF THE PUBLIC POLICY EDUCATOR

Much of our concern with environment is relatively recent and people just have not made up their minds on relative values. I am impressed by the large proportion of people who respond to public opinion surveys with "don't know." Another common situation is when people have decided, but in widely different directions. The standoffs and lack of public action which emerge from the above factors are becoming increasingly costly since the dynamics of our current institutions favor the developer. Even if the developers and their consumers are in the minority, they carry the day if the majority is split or undecided over the alternative. In the past, we have developed new institutions by a slow experimental trial and error process. This will no longer do, or we shall have substantially fewer alternative results to choose from.

Extension education can help people discover common ground

and analyze the cost to the many if conflicts are not resolved. There is a great need to reach substantial consensus on new environmental issues more quickly. Some think the educational process and mass political representation of the new consensus is inherently too slow. This explains those who want a larger role for individual citizen court suits as well as the rock thrower and rioters. Much energy is being wasted looking for institutional loopholes where the well meaning few can get new environmental performance without educating and persuading the many. I believe this is dangerous. We must bring the majority along or we are lost. This is the challenge of public policy education.

The role I urge for policy educators raises its own issues for institutional control. Education changes relationships among people, but little thought has been given to its rules. Perhaps this is because it is regarded as a voluntary laissez faire exchange, and people do not have to listen. This is hiding our head in the sand, for the timing and packaging of information affects public choice. If formal education becomes more involved in helping resolve conflicts and creating common ground, the rules for its competition with other information sources will become more critical. At present, it is common for a prominent politician or group spokesman to assert that a certain proposed institutional rule will have a given effect. This will be reported in newspapers without any attempt to check its accuracy. It will stand as the only widely read information that forms public opinion on a given issue in a certain locale. While academics might be inclined to favor rules insuring wider access to some of the media, our academic freedom instincts favor no public rules for our own behavior. There are as few system rules for extension priorities as for public works projects.

But we public educators cannot insist on information exchange rules for others and omit ourselves. If there are no rules for information exchange, the situation will be dominated by those who can appropriate attention, and publicly supported education may not be very influential. To be influential at all may require a self-discipline that lies at the heart of all collectively created property rights.

CONCLUSION

Institutions reflect the basic underlying covenants and values of society. One set of rules for relating people follows from the engineering approach to human problems and another set from the gut feeling approach. Institutions embody the major directional choices that are widely shared. If society judges that no major changes in direction are wanted, then such institutions as zoning and some new subsidy

programs are appropriate. But if many people judge that our present condition constitutes a sickness requiring a major change, then the institutional analyst and policy educator can prescribe more basic changes in our underlying property rights definition and distribution.

To accomplish a major change in performance of the economy and in its product—man—requires fundamental changes in the rules of human relationships and power. I have illustrated this type of change by the efforts to define the specific extent of public ownership in water resources and the ownership of land value appreciation created by public acts.

These are not matters for faint hearts. They change basic power relations, the locus of decision making, and items of accountability. But if people come to believe that the human potential is not being realized with present institutions, this is the direction to look. Policy educators should not fool the people into thinking that any lesser kinds of institutional changes will do!

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127

END